UNIVERSITY OF ALBERTA

# CHILDREN WHO SET FIRES: TOWARDS A BETTER UNDERSTANDING

BY

LOUISE NADEAU-GAUNCE ©

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# ABSTRACT

The purpose of this study was to explore the factors related to juvenile fire setting. The review of the literature revealed that most of the existing research on juvenile fire setting is based on clinical and institutionalized populations. The review also revealed the lack of a systematic multi-dimensional approach to the study of fire setting in elementary school children and a lack of a firm conceptual base in approaching the subject.

The present study, using grounded theory, was designed with these problems in mind. The goal was to use a qualitative, inductive approach to explore the factors related to juvenile fire setting, using the experiences and perceptions of juvenile firesetters and their parents.

The results of the research are based on four sources. Interviews were conducted with 10 elementary school aged children who had been referred by fire authorities. The children were also asked to respond to seven pictures from the Roberts Apperception Test for Children (McArthur & Roberts, 1982) and to three pictures representing scenes related to fire. The parents were interviewed. They also rated the children on the Child Behavior Checklist-Parent Form (Achenbach, 1991). All the children involved in the study had been repeatedly involved in fire play and fire setting activities and were considered at definite risk of future fire setting.

The findings suggested that fire setting behavior among school-aged children is a complex problem involving a myriad of converging factors and circumstances resulting in feeling of inadequacy and lack of control. Specifically the factors included family disruptions, learning difficulties, child victimization by peers, and tense home-school relationships. Based on the findings, this study identified 'Controlling Fire' as a basic social psychological process (BSPP) that appeared to underlie fire setting in childhood. Specifically, it was proposed that fire setting may be the child's attempt to exert control over a small part of his/her environment. A juvenile fire setting model was developed, incorporating the findings with child development and fire setting literature. It highlights the importance of developmental demands on the school-age child, specially the child challenged by learning difficulties.

UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled CHILDREN WHO SET FIRE: TOWARDS A BETTER UNDERSTANDING submitted by LOUISE M. M. NADEAU-GAUNCE in partial fulfillment of the requirements for the degree of DOCTOR OF PHILOSOPHY in SPECIAL EDUCATION.

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# DEDICATION

This work is dedicated to the memory of my father,
J. N. Henri Nadeau
1916 - 1989
Papa, tu as cheminé avec moi!

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# CHAPTER ONE

## STATEMENT OF THE PROBLEM

Peter and Lisa are 9-and 7-year-old siblings living in an intact family. Being the middle children among six children, they have become playmates. They started a fire, when putting on a "Show of Lights," using strings which they lit on fire then swirled around, in the dark, to the sound of music. A sheer panel of lace curtain caught fire when one of the strings touched it during the show. Fortunately there was little damage, except to the lace panel, because of quick response by their mother, who was alerted by their screams.

Justin is a 9-year-old boy who set fire to a friend's apartment during a sleepover. Prior to the fire, his teacher expressed concern about his emotional state because of his sad affect, lethargy, and comments he made such as, "I wish I'd never been born." The day after the fire, she found drawings in his desk depicting him in a coffin, which had been drawn the previous week. On the evening of the fire, there were no adults in the apartment, the mother having left the boys alone while she went to visit friends. While his friends, Tyler, 10 and Michael, age 7, slept, Justin lit a paper tissue on the electric stove, which he threw in the room where his friends were sleeping. Panicking when a stack of newspapers caught fire, he ran out of the apartment, leaving his friends behind. Had it not been for the intervention of two neighbours responding to the fire alarm, Justin's two friends, ages 10 and 7, who were found unconscious, would have died in the fire. Justin refuses to discuss the motivation for or the events leading to the fire. While he denies any intent to harm his friends, he has made comments suggesting such intent (i.e., "I wish you'd died in the fire").

Marshall is a 6-year-old boy in grade one who is on medication for the treatment of Attention Deficit Hyperactivity Disorder. While the medication has lessened some of his impulsivity and increased his attention span, his mother reports that he has recently started setting pieces of paper on fire. The first instance was during a family barbecue when he lit a small piece of paper on the charcoal, burning his fingertips. Since then, she has found evidence of more fire play, including traces of burned papers and matches behind the living room couch. She is afraid to go to sleep because Marshall has the habit of getting up during the night to play.

These three cases, drawn from personal encounters, are used to illustrate the range in the type and the severity of fire setting behavior in elementary school children. Given these case illustrations, fire setting behavior among children should be easy to identify. In fact, much of the fire setting behavior of children does not come to the attention of parents and even less to the attention of authorities. A number of explanations have been proposed for these facts. In general, children know that playing with matches or inflammatory materials is forbidden, thus, they keep such activities secret (Kafry, 1980). In cases where parents discover activities involving fire, many are concerned about potential consequences of reporting fire setting activities, such as the child being ostracized (Winget & Whitman, 1973) and intervention by authorities or fear of drawing attention to family problems (Gaynor & Hatcher, 1987).

Although fire setting by children has been an ongoing problem that has been addressed sporadically in the literature, much of the research has been limited by the sample size, control groups, and variables studied. In their book on the subject, Gaynor and Hatcher (1987) stated:

> Although there has been a large number of medical, criminological, and fire publications concerning the psychopathology of fire setting, relatively little is known about the origins and treatment of the behavior. This is in part due to the lack of systematic, well-controlled studies presenting reliable data. Many studies are based on impressions from authors who have worked on individual cases. In addition, data on fire setting come from many sources such as juvenile court, mental health clinics, and other community agencies, which makes it difficult to compare samples and draw generalizable conclusions. (p.11)

## Purpose of the Study

The purpose of this study is to use the method of grounded theory as a means to inductively generate a theoretical framework for understanding the phenomenon of children who have a history of fire setting and have been identified as high risk for setting more fires. My intention was to explore this phenomenon, through observations, psychological testing, and semi-structured child and parent interviews. I plan to use the theoretical foundation that emerged from this research to guide the conceptual parameters and my research methodology in a future longitudinal prospective study of juvenile firesetters. **The research question was: What is the phenomenon that results in a child progressing from being curious about fire to setting fires?**

## My Perspective for the Study

> Questions may be raised at this point concerning how during sampling the emerging theoretical sensitivity can be reconciled with the theoretical biases, proclivities, and premises of the individual investigator. This issue brings up some significant points concerning the methodological orientation of the researcher. Most generally, the background experiences of one's education and training is used to *sensitize* the researcher to address certain kinds of broad questions. (Glaser, 1978, p. 39)

The importance of the researcher bracketing his or her own preconceived ideas about the phenomenon, in order to understand it through the experiences of the informants is underlined by other researchers (Field & Morse, 1985; Ruben & Ruben, 1995). It is also important for me to articulate my theoretical perspective, so that the reader can be aware of the possible biases I brought to the research. I can best do that by sharing my background with the reader.

My training in psychology started in the early 1970's in Southern California. I attended a large university where I had the privilege of access to professors from diverse theoretical backgrounds, ranging from a psychoanalyst to a number of learning theorists. Some of the learning theorists favored operant conditioning, others embraced classical conditioning. Among the competing world views I was exposed to, I adopted the principles of humanistic psychology, especially Maslow's (1954) postulated hierarchy of needs as a determinant of human behavior and Rogers' (1961) strong belief that everyone is born with the potential to develop into a normal personality. I was also influenced by Rollo May's (1967) existential emphasis on the importance of the "meaning" behind the action.

In the mid 1970's, I moved to Alberta, and I was introduced to the medical model. I initially believed that this emphasis was influenced by the hospital and community mental health settings in which I worked. However, I have found the medical model prevalent in non-medical agencies during the 1990's. Examples of this are insurance companies who require a DSM-IV diagnosis before agreeing to the provision of insured counselling services and Alberta Education's use of the DSM-IV to make Special Education funding decisions. This trend of overuse of or over dependence on the medical model, with its inherent disease orientation, has become a real concern with me. In my work with students who experience severe behavioral problems, I have been put in a position where I have had to label the child with either an Oppositional Defiant Disorder or a Conduct Disorder label in order to obtain much needed funding for special assistance. This bias, identifying the child as the problem, has been a sore point for me. Based on 24 years of working with children and families in residential, community, hospital, and educational settings, I believe that childhood behavioral problems are a complex phenomenon involving multi-dimensional factors.

My choice of this research topic was based on my experience as a child and adolescent psychologist, teacher, and school counsellor. The dissertation topic evolved as the result of the near tragic event presented at the beginning of this chapter. All three children involved were students enrolled in a segregated class for children identified as having a 'Severe Behavior Disorder' at the elementary school where I worked. Follow-up intervention underlined for me the limitations of DSM-IV labels in providing meaningful descriptions of children.

## Relevance of the Study

In Alberta, fires set by children under age 12 are classified as "children playing with" fire sources. There is no information kept on the age or the sex of this under 12 group, nor do the statistics include whether the fires were set inadvertently, during fire play, or deliberately. Although matches and lighters are the major source of heat used by Alberta children to light fires, other sources include stoves, candles, lamp bulbs, furnaces, and fireplaces (Fire Commissioner's Office, Alberta Labour, personal communication, February 12, 1998).

There were 1,196 fires set by children under the age of 12 reported in Alberta between 1992 and 1997 (see Table 1). As a result of these fires, 226 persons were injured and 13 persons died. The financial cost of these fires amounted to $17,187,573. Table 1 gives a breakdown of these statistics by year. While the downward trend looks positive to everyone hoping for a decrease in the devastation of fires, it may be due to a change in reporting and a change in the Canadian Hazardous Products Acts. Between 1993 and 1995, the government of Alberta gradually transferred the responsibility of fire inspections to municipalities. Thus, while provincial fire safety codes officers are still available to conduct the investigations, it is now at a cost of $100.00 per hour to the

Table 1

Number of fires, deaths, injuries, and property $ loss by children under 12

| Year | # of fires | Fire deaths | Fire injuries | Property $ loss |
|---|---|---|---|---|
| 1992 | 306 | 4 | 37 | $3,263,429 |
| 1993 | 277 | 2 | 54 | $4,044,242 |
| 1994 | 262 | 2 | 51 | $3,428,423 |
| 1995 | 203 | 4 | 51 | $3,262,246 |
| 1996 | 145 | 1 | 33 | $3,189,238 |
| TOTAL | 1,196 | 13 | 226 | 17,187,573 |

Note. Source: Fire Commissioner's Office, Alberta Labour (personal communication, February 12, 1998)

municipality. As a result, many municipalities are apparently restricting fire investigations to cases where death, injury, or severe structural losses occur. Given that the statistics are based solely on fires investigated by fire safety codes officers, the downward trend is expected (Wijayasinghe, personal communication, March 19, 1998). As well, the Canadian Hazardous Products Acts was amended on June 14, 1995 to include specification that all disposable lighters and some refillable lighters must be child-proof. Since it is estimated that a majority of younger children use a lighter as fire source (Foerger, 1995), the legislation is surmised as responsible for some of the apparent decrease in the report of fires set by children in Alberta.

In spite of the downward trend (see Table 1), it can be noted that, in 1996 alone, children under age12 set 145 fires. These fires resulted in 33 injuries, one death, and $3,189,238 in property loss (Fire Commissioner's Office, Alberta Labour, personal communication, February 12, 1998).

The 1991-1996 statistics are representative of recent years. Information from the period of 1983 to 1987 indicates that "children playing with" heat sources in Alberta "were determined responsible for 1933 fires causing 28 deaths (two men, two women, 24 children), 161 injuries (59 men, 38 women, 64 children) and $12 million in property losses" (Alberta picture, 1988).

Children may be involved in even more fires than these statistics indicate. Dittmar's (1991) reported that up to 50% of fires of undetermined origin may have been set intentionally. While she did not suggest that children are responsible for all those fires, Dittmar's findings reflect the possibility that the incidence of fires set by children may be higher than indicated in Table 1. When one considers the magnitude of the potential consequences of 'playing with matches,' it becomes evident that there is a need to identify criteria best suited to identify characteristics predictive of the likelihood of progressing from playing with matches to fire setting behavior by children.

## Definitions

For the purpose of this study, the following definitions were used:

Children: youngsters between the ages of 6 years old and 12 years old.

Fireplay: "result of unsupervised children gaining access to, and experimenting with, ignition sources out of curiosity" (Wijayasinghe, 1994, p.2).

Fire setting: deliberate or intentional fire starting behaviours (Wijayasinghe, 1994).

Juvenile firesetters: children who set fire, regardless of motivation, intent, or consequences.

In the following chapter, a review of the literature is presented. The review includes a discussion on the intrigue of fire for humans, fire interest in normal development, previous theory and research on children who set fire, present juvenile fire setting classifications, and research on adult firesetters. In the third chapter, the research method is presented, including an overview of grounded theory (Glaser, 1978; Glaser & Strauss, 1967), the approach which was used for this study. In the fourth chapter, the findings of this study are presented. In the fifth chapter, the findings are placed in the context of other research, followed by the presentation of a theory of fire setting in children, incorporating the findings of this study and of the literature. The final section of the fifth chapter includes the strengths and limitations of this study, as well as implications for practice and further research.

# CHAPTER TWO

## LITERATURE REVIEW

There is continuing discussion among researchers about the place of literature review in grounded theory studies. It is a controversial topic because reviewing the literature in grounded theory research is an ongoing process throughout data collection and analysis in order to link the empirical findings to the conceptual material of the existing literature. (Glaser, 1978; Strauss & Corbin, 1990). Some authors suggest delaying the literature review until the initial data collection is done (Glaser, 1978; Rennie, Phillips, & Quartaro, 1988). Others suggest doing a preliminary review followed by more extensive review as the data emerge (Strauss & Corbin, 1990). Others suggest doing a comprehensive review initially, to be followed by ongoing reviews, as themes emerge (Chenitz & Swanson, 1986). I have tried to address the issue of literature review in a processual fashion by reviewing the literature regularly as the themes emerged. This way, relevant areas that emerged during the research were integrated with the data. However, prior to the collection of data, six relevant areas were examined in the literature. They are presented in the present chapter. First, there is a discussion of the intrigue fire seems to hold for humans. Second, children's interest in fire is reviewed. Third, the research on children who deliberately set fire is reviewed. Fourth, classifications presently used to categorize fire play behavior are examined. Fifth, there is a presentation of the ecological systems perspective of child development. Finally, an overview of the research on adults who set fire is presented.

## Intrigue of Fire

Fire is intrinsic to the human condition. It has always held a fascination for humans. Fire is evident in mythology and folklore, in which it stands for passion, power, and sexuality. In Greek mythology, power and love are embodied in Prometheus, the Titan who stole fire from Hephaestus, the god of fire, and gave it to mankind so that it could become its force (Delcourt, 1965). Hercules, the only mortal to make the full transition from mortality to immortality in Greek mythology, threw himself on a funeral pyre and was carried up to Mount Olympus, where he became a god. In Roman mythology, we find Vulcan, the god of fire, who was invoked to prevent fires because of his association with the destructive forces of volcanoes. In Ancient Rome, during his feast, celebrants threw little fish into the fire as sacrifices for the preservation of life (Perowne, 1969). In the Bible, fire is associated with cleansing (Isa.6:6,7), spiritual power (Psa. 104:4; Matt. 3:11; Luke 3:16), punishment, and deity (Swanson, 1994). The link with punishment is evident in Genesis 19 which describes the destruction of the cities of Sodom and Gomorrah by "brimstone and fire" to punish the citizens for their evil ways and to make an example of them. It is also evident in Revelations 21:8, where cowards, liars, perverts, murderers, and immoral persons are threatened with the lake of fire, which is the "second death." The association with deity is seen in Exodus 3:2, where the angel of the Lord appeared in a flame of fire.

Most cultures have folklore associated with fire. The folklore has resulted in celebrations and rituals such as the Fire Dances of Sri Lanka, the Flamenco of Spain, the North American Indian dances around the fire, fireworks, and the celebrated campfire that so many enjoy in North America. Today there are also a number of sexual references to fire in expressions such as "in the heat of passion," to have "the hots" for someone, "fiery embrace," and Jose Felliciano's popular song, "Come on baby light my fire." There are also a number of references to the intensity and power of fire evidenced by the following quote from the Canadian women's hockey coach, during the 1998 Winter Olympics, "We talked about lighting our own flame, our own Olympic torch and igniting each other. We talked about starting a fire tonight within our own team and letting it spread, day by day, like a dry field on fire and taking the country by storm." (Long, 1998, p. D3)

## Fire Interest in Normal Development.

Thus it becomes evident that, in spite of the obvious danger presented by children who experiment with fire, one must remain objective when deciding whether a child is motivated by curiosity or whether the fire setting is reflective of underlying problems. Playing with fire is not necessarily pathological. It is part of the natural curiosity of preschoolers. In a study done on a group of 5- and 6-year old school children, it was found that interest in fire is prevalent in that age group (Block, Block, & Folkman, 1976). The interest is expressed in their play and in their questions about fire. Actual fireplay is believed to occur primarily in young boys between the ages of 5 to 9 years as they experiment with matches and other fire starting materials (Kafry, 1980; Showers & Pickrell, 1987). According to Gaynor (1991), for most youngsters experimentation with fire setting results in mastery and control over fire when it takes place under controlled and supervised conditions. In the introduction to a study they conducted on children's involvement with fire, Grolnick, Cole, Laurenitis, and Schwartzman (1990), reported:

> Recent studies of children seen by the fire department for having started a fire suggest, however, that the majority are not significantly disturbed (Cole et al., 1986; Cole, Laurenitis, McAndrews, McKeever, & Schwartzman, 1983; Fineman, 1980). Further, more than 60% were motivated by curiosity rather than any attempt to deliberately destroy life or property. (p. 128)

Their own study, investigating elementary school children's fire play, was based on a large, representative sample (N=770) in a midsize city (Grolnick et al., 1990). In their study, 38% of the children admitted to having played with fire in the past. Fourteen percent reported that they had played with fire within the 6 months preceding the survey. Although they reported a higher incidence of boys reporting fire play, they did not give the exact figures. In this sample, the strongest correlate of fire play was age, suggesting a linear increase, with the frequency of fire play increasing with age.

In an earlier study, cited by Wooden and Berkey (1984), involving 47 five-and-six-year old children from a general population, a higher percentage of fire play was found. In that study:

> …only two boys had been involved in agency-documented fires, although 60 percent of the boys and 33 percent of the girls had displayed a general interest in fire by requesting to light matches from time to time or had admitted to playing with fire materials without permission. (Folkman, 1972, p. 25)

## Children who Set Fires: Previous Theory and Research

So, what sets apart the children who cross the line from curiosity to setting fires deliberately? The phenomenon of children who set fires deliberately has captured the interest of many psychologists and psychiatrists. As early as the 1930's, researchers were speculating about children who set fire (Yarnell, 1940). Three major perspectives found in the literature are presented below.

### Psychoanalytic Perspective

Early researchers on fire setting were influenced by psychoanalytic theory, which associated fire setting with phallic urethral fixation and enuresis. The link was hypothesized as the result of Freud's analysis of the Prometheus myth. "Now I conjecture that, in order to possess himself of fire, it was necessary for man to renounce the homosexually tinged desire to extinguish it by a stream of urine" (Freud, 1932, p.405). Freud suggested that the warmth of fire is "analogous to the passion of love" and that "the form and motion of the flame suggest the phallus in action" (p. 407). He also proposed that the "god who is defrauded when the gratification of extinguishing fires is renounced" is the id. In an earlier document, Freud concluded: " It is as if primitive man had had the impulse when he came in contact with fire, to gratify an infantile pleasure in respect of it and put it out with a stream of urine" (Freud, 1930, p.50). Erlenmeyer

(1932) concurred with Freud's hypothesis regarding the renunciation of the id. He supported his view by citing evidence from the literature:

> Putting out fire by urinating-which is also introduced in the later fables of Gulliver in Lilliput and Rabelais's Gargantua-therefore represented a sexual act with a man, an enjoyment of masculine potency in homosexual rivalry. Whoever was the first to deny himself this pleasure and spare the fire was able to take it with him and break it in to his own service. By curbing the fire of his own sexual passion he was able to tame fire as a force of nature. This great cultural victory was thus a reward for refraining from gratification of an instinct. (p. 411)

The review of the literature suggests that the psychoanalytic perspective has lost popularity in explaining juvenile fire setting. The loss in popularity may be due to failure to find a link between fire setting and enuresis (Fine & Louie, 1979; Showers & Pickrell, 1987), thus undermining Freud's premise (Freud, 1932). However, there is a group of psychoanalytically-oriented practitioners from New York who have studied the phenomenon (Sakheim & Osborn, 1986; Sakheim, Osborn, & Abrams, 1991; Sakheim, Vigdor, Gordon, & Helprin, 1985). Sakheim and various of his colleagues have published three separate studies on juvenile firesetters, who were between the ages of 6 to 17 years and were living in residential treatment centres. In each study, they used an extensive battery of projective tests and the WISC-R. The two earlier studies compared fire setting residents to matched non-fire setting residents. The 1991 study was an extension of the earlier studies. In this study, they compared 25 children with minor fire setting histories to 25 children with severe fire setting histories. Based on the cumulative findings of the three separate studies (N=100), they concluded that it is the personality structure and underlying emotional state of children that determines risk, rather than availability of flammable material. They proposed 10 child-related indicators of being seriously at risk for future fire setting. Only one of the indicators supported Freud's theory: namely, excitement, pleasure, or sexual arousal stimulated by lighting or watching fires as well as fire preoccupation as revealed on projective tests, in an interview, or in therapy.

The other indicators of being seriously at risk for future fire setting proposed by Sakheim and his associates (1991) are as follow: Intense feelings of anger and resentment at maternal neglect, rejection, deprivation, or abandonment; feelings of impotent rage at insults or humiliations inflicted by peers or adults; poor judgment in social situations; weak social anticipation, poor planning, and competence; impulsivity with poor self-control; weak or inadequate superego development, with a tendency to experience little guilt or remorse about previous acts of fire-setting; cruelty to children or animals; and a psychiatric diagnosis of Aggressive Conduct Disorder. A serious limitation of the above studies relates to the possibility of bias in the scoring of the projective tests, given that the assessments were done by the clients' therapists, who were informed about the nature of the study.

## Behaviorist Perspective

The behaviorist perspective is also evident in the literature. Fineman (1980) suggested that firesetters "probably have been 'taught' from an early age that playing with fire is an acceptable behavior" (p. 492). Wooden (1985) cited the reinforcing aspects of fire setting that lead to recidivism. For instance, the child may obtain positive reinforcement from the attention he/she receives for setting a fire or he/she may gain approval of peers for his/her daring behavior, or he/she may find the fire exciting. Foerger (1995) stated, "Fire setting behaviour, perhaps like all other behaviours, is learned in the context of satisfying curiosity" (p.12). He suggested that in order to gain a better understanding about fire setting behavior, we need to "investigate the factors that reinforce fire play and move it from curiosity to destructive fire setting" (p.12). The social learning paradigm (Bandura, 1963) is evident in Macht & Mack's (1968) study connecting fire setting behavior in adolescents and fire-related employment of their fathers as firefighters, furnace stoker, or burner in a junkyard.

## Dynamic-Behavioral Perspective of Fire setting

Building on the behaviorist perspective, the dynamic-behavioral perspective of fire setting was first evident in the Vandersall and Wiener (1970) paper. The dynamic-behavioral perspective was specifically designed to explain fire setting behavior. It emphasizes combined constitutional, environmental, and experiential factors. Vandersall and Wiener postulated that fire setting happens in many situations and personality constellations, may have a variety of dynamic meanings, and that the consistent factors in fire setting have to do with ego integration and impulse control" (p. 63). From a similar perspective, Fineman (1980) proposed that "fire setting behavior can be viewed as an interaction between dynamic historical factors which predispose a child toward a variety of antisocial acts, historical environmental contingencies which teach a child to play with fire, and immediate environmental contingencies which motivate the fire setting act." (p. 488). In an article integrating the major findings evident in the juvenile fire setting literature, Kolko and Kazdin (1986) proposed a tentative model of fire setting behavior that reflects the dynamic-behavioral perspective. Their conceptual model consisted of three domains. The 'learning experience and cues' domain included early modeling, interest, direct experiences, and availability of adult models and incendiary material. The 'personal repertoire' domain included cognitive, behavioural, and motivational components. The 'parent and family influences and stressors' component included stressful external events, limited supervision and monitoring, as well as parental distance, lack of involvement, pathology, and limitations.

In an attempt to bring order to the research on juvenile fire setting, Gaynor and Hatcher (1987) developed a multidimensional theoretical framework about the psychosocial determinants of fire setting behavior. They identified three major categories of determinants: individual characteristics, social circumstances, and environmental conditions. Each category was divided into a number of dimensions, which were further broken down into variable clusters. Individual characteristics included demographic, physical, cognitive, emotional, and psychiatric factors. Social circumstances included family, peer, and school factors. Environmental conditions included antecedent stressors, behavioral expression, and consequences arising from the fire setting behavior. This classification of determinants of fire setting was based on the research that had been conducted to that date on juvenile firesetters. Although much of the research it was based on was flawed, due to methodological inconsistencies (Kolko, 1985), this list is useful for conveying the complex nature of juvenile fire setting behaviour

A number of empirical studies on the differences between firesetters and nonfiresetters (Kazdin & Kolko, 1986; Kolko & Kazdin, 1990; Sakhein et al., 1991; Forehand, Wierson, Frame, Kemptom, & Armistead, 1991; Showers & Pickrell, 1987) have been conducted since Gaynor and Hatcher (1987) and Kolko and Kazdin (1986) presented their conceptual models. The more recent studies is an improvement in the description of the population and of the criteria for inclusion. However, except for the Sakhein et al. (1986,1991) studies reported earlier, most of the studies have relied on single informant and/or self-report questionnaires. One exception of note was a two-year follow-up study of 6- to 13-year old children's descriptions of their fire setting incidents, using structured interview instruments (Kolko & Kazdin, 1994). Although the follow-up group (N=95) accounted for only 52% of the original sample (N=182), the findings provided useful information, namely that the children acknowledged that they were involved in multiple fire setting incidents, burned primarily paper, trash or garbage, and set fires alone about half the time.

In summary, a review of the literature on juvenile fire setting suggests that the dynamic-behavioral perspective has largely replaced the psychoanalytic and the behavioral perspectives in explaining fire setting behavior. The emphasis on a multidimensional theoretical framework was first evident in 1970 (Vandersall & Wiener) and gained popularity in the 1980's (Gaynor & Hatcher, 1987; Kolko & Kazdin, 1986). Lamenting that juvenile fire setting has "eluded systematic investigation and review in its own right in the psychological literature" (1985, p. 347), Kolko conducted a literature review of psychological and psychiatric studies. In the course of the review, he encountered the following methodological flaws:

- Definitional ambiguities, as evident in heterogeneous sample groups ranging from children with 'tendencies' to children who set numerous fires, some causing injuries and property damage. In many studies, there was no definition of what constituted fire setting.

- Multiple referral sources, including (in the few cases that named the source of referral): inpatient and outpatient psychiatric units, private clinics, residential treatment units, the courts and, a children's burns unit.

- Failure to account for confounding variables in incidence rates.
- Under-emphasis of the behavioral parameters of the incidents, such as frequency, site, social context, motives, and cost of damage.
- Lack of attention to the circumstances around the youngster's first episode of fire setting.
- Neglect of long-term follow-up assessment.

The next section attempts to reduce some of the ambiguity evident in the use of terms associated with firesetters.

## Classification of 'Playing with Fire'

Some of the confusion found in the literature on fire setting results from ambiguity evident in the use of terms associated with firesetters. When one considers the prevalence of fire play in normative samples, the need for a classification system for children involved with fire becomes evident. In the juvenile fire setting literature, there are three classification systems which are relevant to the present study.

First, Wooden & Berkey (1984) divided firesetters into four different classes:

Playing with matches firesetter Children who are "merely curious about fire or who had an accident while playing with fire" (p. 50).

Crying-for-help firesetter Children with "emotional, psychological, and even physical problems that account for their fire setting behavior" (p. 51).

Delinquent firesetters Adolescents who "set fires as acts of vandalism, as a cover for other crimes, as a way of creating excitement, or for the pure enjoyment of destroying property or objects" (p. 65).

Severely disturbed firesetters Small group of children and youth who suffer from psychiatric disorder.

Second, the Federal Emergency Management Agency (1988) classify firesetters in three different classes as follow:

Curiosity firesetters Children who experiment with fire as a way to explore their environment. Most of the children in this category are 10 and under. The 11 to 13 year olds who fall in this category "may start a fire accidentally or because of poor judgment" (p. 23).

Problem firesetters – Ages 7 - 10 Many of these children are reacting to recent changes in their environment and are experiencing problems at home and at school.

Problem firesetters – Ages 11 – 13 Many of these children are also reacting to recent changes in their environment. However, peer pressure, anger, and revenge may be additional factors. As well,

> "attention from their friends, feelings of power and importance, feelings resulting from property destruction, and excitement may all be involved in continued fire setting" (p. 24).

Lastly, Gaynor and Hatcher (1987) proposed three categories of children playing with fire:

| | |
|---|---|
| Little risk | Children who "set fire by accident or because they are curious and they want to experiment or explore their environment" (p. 1). |
| Definite risk | "Youngsters who are repeatedly involved in fire play and fire setting activities" (p. 3). The majority of these youths are boys between 8 and 13 years old who suffer from psychological problems. |
| Extreme risk | Youngsters who have also "been involved in numerous incidents of fire setting" (p. 3). However, this category usually consists of adolescents who have a history of juvenile delinquency or severe mental illness. |

For the purpose of this study, I used the classification proposed by Gaynor and Hatcher (1987), which corresponds to the classification used by the Edmonton Emergency Services and the Alberta Fire Commissioner's Office. As well, since the present study will examine the process and dynamics of children progressing from being curious about fire to setting fires, a classification based on the nature of the fire setting behavior seems more relevant.

## Ecological Systems Theory of Child Development

Although it is not specific to fire setting behavior, Bronfenbrenner's ecological systems theory (1979) is congruent with the dynamic-behavioral perspective, described earlier (Fineman, 1980; Gaynor & Hatcher, 1985; Kolko & Kazdin, 1986; Vandersall & Wiener, 1970). While the dynamic-behavioral perspective emphasizes combined constitutional, environmental, and experiential factors in juvenile fire setting, the ecological systems theoretical perspective goes beyond the immediate world of the child. According to the ecological systems theory, child development is a dynamic, mutually reciprocal process in which the children are actively restructuring the multiple levels of environment he encounters while being simultaneously influenced by the environments.

Bronfenbrenner (1979) proposed four systems, each increasingly removed from the child, as follow:

**Microsystem** - Consisting of the daily pattern of activities and relationships experienced within the family, neighborhood, day-careschool, and community.

**Mesosystem** - Consisting of the relationships among all the people immediately concerned with the child's microsystems, such as the home-school relationships.

**Exosystem** - Consisting of settings that are not actively involved with the child but affects the child's immediate setting, such as the parent's workplace.

**Macrosystem** - Consisting of the characteristics of the broader social and historical context which filters into the exosystem, such as the ideological or belief systems inherent in society.

Other aspects of child development that emerged as relevant to the present study will be presented as part of the discussion. These aspects include psychosocial development, moral development, and Maslow's hierarchy of needs (1954).

## Adults Who Set Fires

Existing literature on adults who set fires was also reviewed in order to gain a larger perspective about the nature of the problem. However, various researchers in the field of pathological fire setting have not found a direct relationship between childhood fireplay or fire setting to fire setting during adulthood (Fineman, 1995; Geller, Fisher, & Moynihan, 1992; Kolko, 1989). On this subject, Fineman (1995) stated that, while he'd never met an adult firesetter who didn't admit to setting fires as a child, the majority of children who set fires do not go on to become arsonists, the term used for adult firesetters.

Fire setting in the adult population is often associated with pyromania, the most extreme of fire setting behaviors (Geller, Erlen, & Pinkus, 1986; Geller, McDermeit, & Brown, 1997). The term pyromania was first used in the writing of

Marc in 1933. It referred to pathologic arsonists (Lewis & Yarnell, 1951). Subsequently, the term was refined by the American Psychiatric Association to refer to a specific mental disorder, falling under the category of "disorder of impulse not elsewhere classified." Pyromania is described by DSM-IV (1994) as:

> A. Deliberate and purposeful fire setting on more than one occasion.
>
> B. Tension or affective arousal before the act.
>
> C. Fascination with, interest in, curiosity about, or attraction to fire and its situational context (e.g., paraphernalia, uses, consequences).
>
> D. Pleasure, gratification, or relief when setting fires, or when witnessing or participating in their aftermath.
>
> E. The fire setting is not done for monetary gain, as an expression of sociopolitical ideology, to conceal criminal activity, to express anger or vengeance, to improve one's living circumstances, in response to a delusion or hallucination, or as a result of impaired judgement (e.g., in dementia, mental retardation, substance intoxication).
>
> F. The fire setting is not better accounted for by conduct disorder, a manic episode, or antisocial personality disorder. (p. 615)

The term has been in and out of favour since it was coined. It has been suggested by some authors that it is not a useful term (Reichlin & Weis, 1992; Stewart, 1993). Yet, professionals in law enforcement and fire investigatiors use the label loosely and erroneously (Geller, McDermeit, & Brown, 1997). Pyromania has been referred to as an "elusive concept" which is poorly understood by fire investigators and law enforcement professionals and leads to poor differentiation of the causes of fire.

In the classification proposed by Geller (1992b), pyromania is limited to a subsection of arson associated with mental disorders. According to researchers, a very small percentage of firesetters fall under the category of pyromaniacs (Crossley & Guzman, 1985; Geller et al., 1986; Geller, 1992b, 1992c; Geller & Bertsch, 1985; Leong, 1992; Rice & Harris, 1991). For instance, a study canvassing experienced psychiatrists across Canada, found that only 2.9% of the 243 arsonists they had assessed met the criteria for pyromania ( Crossley & Guzman). In another study conducted at a psychiatric hospital, none of the 26% of the patients who had set fires showed evidence of pyromania (Geller & Bertsch). Even in the maximum security psychiatric setting population studied by Rice and Harris (1991), pyromania and sexual motivation were uncommon. These figures are significantly lower than the 24% to 45% proposed by Lewis and Yarnell (1951).

Vreeland and Levin (1980) commented on the fact that relatively little is known about the etiology of fire setting, given how long it has been of interest to researchers. They conducted a literature review, drawing extensively on Lewis and Yarnell's (1951) landmark study. Although cautioning that the literature "contains a paucity of systematic, well-controlled studies which present reliable data" (p. 32), Vreeland and Levin concluded that firesetters tend to be individuals "with several maladaptive behaviour patterns, of which fire setting is one" (p. 44). Some of the other maladaptive behaviors they identified in the firesetter group are alcohol abuse, marital, occupational and sexual problems, as well as a variety of other criminal and antisocial behaviors.

In a subsequent review of the literature, Geller (1992b) described arson, the term most often used in the literature on adult fire setting, as " a complex, multidetermined event that has its origins in everything from profit to pathology" (p. 623). Based on his literature search, Geller proposed a comprehensive classification of arson that includes four categories. One of the categories relates to juvenile fire setting and is broken down into fire setting and fire play. The other categories are related to adult fire setting and are typed according to the presence or absence of associated conditions. For example, the category of 'arson associated with mental disorders' includes disorders of thoughts or perception, mood, judgment, and impulse control. It also includes communicative arson, which refers to fire setting employed to communicate a desire, wish, or need.

Fineman (1995) proposed these eight types of firesetters: (a) curiosity; (b) accidental; (c) cry for help; (d) delinquent or antisocial, i.e., vandalism, fire for profit, and fire to cover another crime; (e) severely disturbed, i.e., the paranoid, psychotic, and pyromaniac individuals; (f) cognitively impaired; (g) sociocultural, i.e. attention to a cause, religious, and mass hysteria; and (h) wildland firesetter.

Like Geller (1992b) however, he cautioned that the types are not exclusive as many motives and reasons may underlie fire setting. As stated earlier, Fineman views behavior from the dynamic-behavioral perspective. He perceives fire setting behavior as an interaction between a predisposition to maladaptive behavior, past environmental factors that have taught and reinforced fire setting, and present environmental conditions that encourage fire setting.

Other researchers conveyed a less heterogeneous picture of firesetters. For instance, in a Finnish study comparing the pretrial psychiatric evaluations of inmates accused of arson with those convicted of homicide, arsonists showed a poorer educational and employment history, a higher level of suicide attempts, a greater incidence of problems with alcohol, and a higher frequency of past psychiatric care (Raeswaenen, Hakko, & Vaeisaenen, 1995). Another empirical study, using cluster analytic techniques, was conducted on 243 male firesetters from the maximum-security division of a large Canadian psychiatric institution (Harris & Rice, 1996). The variables were based on the researchers' past studies on mentally disorded firesetters (Harris & Rice, 1984; Rice & Harris, 1991) and on the theoretical literature about pathological firesetters. For instance, earlier studies indicated that anger, revenge, delusion, and attention seeking are common motives for arson (Rice & Harris, 1991) as are financial gain and vandalism (Pisani, 1982). Thus, they were included among the variables.

Harris and Rice's (1996) findings suggested that there are four homogeneous subgroups of pathological firesetters that are distinct from one another. The largest group (33%) consisted of individuals whose motivation for fire setting were primarily delusional, usually secondary to schizophrenia. The second largest group (28%) included men who were most likely to have set their fires for anger or revenge. These men had the best backgrounds, in terms of intelligence, education, employment, level of aggression, criminal activities, and family history. They were also the least assertive of the subgroups, thus they were labeled the unassertive group. The next subtype consisted of individuals who had the worst family background, childhood, and school history. They had little criminal history, except for setting a number of fires as adults. The smallest subtype (16%) was the group of individuals who had extensive criminal histories. These men were most likely to have been rejected and/or abused as children, be aggressive as adults, and to have been diagnosed as personality disorders (Harris & Rice, 1996). The four subtypes and percentages suggested by Harris and Rice are inconsistent with other reports. For example, Holmes and Holmes (1996) reported the following motives: (a) revenge (41%), for real or imagined affront, (b) excitement (30%), which can consist of sexual excitement, thrill, attention, or recognition seekers, (c) vandalism (7%), usually consisting of a relatively younger group than the adults, with the majority being children between the ages of 10 to 14 years old, (d) crime concealment, (e) profit, and (f) mixed motives.

In contrast, Sasser and Sasser (1998) maintained that the most prevalent motive for fire setting is vandalism, accounting for as many as 40% of deliberately set fires, followed by fire for profit, which has become a rather lucrative business in North America. They stated that the third motive, revenge, often results in the most easily solved crimes of arson due to the anger underlying the act and the links between the victim and the arsonist. Pyromania and cover up for criminal acts were the fourth and fifth most prevalent motives for fire setting. The major reason for the difference between the findings in these studies is most likely the difference between the populations studied. Given the specialized population found in a maximum-security psychiatric facility, the high incidence of delusional thinking as motivation for fire setting in the Harris and Rice (1996) study is not surprising. It underlies the complexity of pathological fire setting. For example, as with research in children fire setting, much of the research in adult arson is based on selective samples of apprehended firesetters from psychiatric hospitals or forensic settings. Yet, the research suggests that only a small percentage of deliberately set fires are ever solved (Geller, 1992b; Harris & Rice, 1996), thus suggesting that these samples are not be representative of the general population of arsonists.

Geller (1992c) listed several problems with adult literature including:

- Biased samples based on select members of the small percentage of firesetters who are apprehended or convicted.
- Specialized populations such as prisons and maximum-security psychiatric hospitals.

- Attempts to classify the firesetters rather than the acts, which ignores that many fires may be set by one individual for different reasons.

However, recent research conducted in Britain by Canter and Fritzon (1998) used a different approach to address some of the concerns expressed by Geller (1992). Rather than study a subset of patients or prisoners, they analyzed the official police records of suspicious, malicious fires in which there was a known firesetter, who may or may not have been apprehended. They studied the records of 175 arson fires from five different jurisdictions across England. The researchers identified 42 salient variables from which they created a data matrix, based on the presence or absence of the variables.

Another innovative aspect of Canter and Fritzon's (1998) approach was their inclusion of the motivation and the nature of the arson targets within the same framework. This is consistent with Fineman's (1995) suggestions that any categorization of firesetters should focus on the risk and probability of future fire related dangerous behavior. Included in such a categorization would be whether the motivation is internal or external to the firesetter and whether it is directed at objects or at living things. The data on the 175 arsons evaluated by Canter and Fritzon showed that there were statistically significant behavioral consistencies differentiating person-oriented from object-oriented arsons and instrumental (i.e., arson for profit, cover up for other crime) from expressive (need to express anger or other emotions) motivation. The authors concluded that a number of "psychological profiles" are at the origin of fire setting. These profiles include a deviant life-style, self-destructive tendencies, a limited way to deal with others, or a means of expressing frustration or anger.

In conclusion, it is the lack of a systematic multi-dimensional approach to the study of fire setting in elementary school children and the lack of a firm conceptual base in approaching the subject that led me to consider a different research method to studying the problem. As I reviewed the literature, the need for qualitative research and theory development in this area became evident. It was my hope that the use of grounded theory in a community-based study would provide the opportunity to explore the factors related to juvenile fire setting from the participants' perspective.

# CHAPTER THREE

# METHOD

This chapter presents the rationale for using the grounded theory approach and the research procedures. The research procedures include: selection of participants, method, analysis of data, as well as reliability and validity. The method section is divided into three parts, ethical procedures, parent interview, and child interview.

## Grounded Theory Research

Grounded theory is a method for developing a theoretical model grounded in data that are systematically gathered and analyzed (Glaser & Strauss, 1967) in contrast to a theory that is developed conceptually and then tested empirically. Grounded theory is based on the symbolic interaction tradition of social psychology and sociology (Chenitz & Swanson, 1986). "Symbolic interactionism is both a theory about human behavior and an approach to inquiring about human conduct and group behavior" (Annells, 1996, p. 380). The constant comparative analysis is central to this approach. It consists of overlapping processes of data collection, analysis, categorization, reduction, and hypothesis formation until a conceptual framework is developed that explains most of the phenomenon being investigated. The continuous comparative method has been compared to factor analysis, with the researcher's brain doing the analysis instead of a computer. Stern suggested that grounded theory is "especially helpful – even necessary – in attempting to study complex areas of behavior problems where salient variables have not been identified" (1980, p. 20). Grounded theory differs from other qualitative approaches to research because of its emphasis on the development of theory (Strauss & Corbin, 1994) and on the interplay between inductive and deductive thinking. Thus, although it has been used mostly in qualitative studies, it has applicability to quantitative studies also (Strauss & Corbin, 1994). Some researchers view the strength of grounded theory in its providing a detailed account of the elements of the phenomenon under investigation (Glaser, 1978). Others view this method as providing the foundation for future research (Bernstein & Epstein, 1994; Olshansky,1996). Corbin (1997) asserted that grounded theory "not only legitimated the use of qualitative methods during a time when positivistic approaches to research dominated sociology and many of the other disciplines but also underscored the need for research-based theory development" (p.150).

Fire setting in children has been identified as a phenomenon consisting of complex characteristics and processes ( Kolko & Kazdin, 1986). The grounded theory method was considered an appropriate approach for this study because of its usefulness in building empirically grounded theory. Grounded theory research fits the realities of clinical practice because its findings are embedded in the natural world, the world of multiple meanings and variables (Gilgun, 1994). Glaser's approach to grounded theory was selected as the guiding analytic framework because of its grounding by systematic analysis of all data with constant comparison through the coding process until a theory emerges (Glaser, 1978).

## Research Procedures

### Selection of Participants

For the purpose of this study, a community-based, theoretical sampling was used. Theoretical sampling refers to the process of beginning with a homogeneous sample of participants who represent the phenomenon. Subsequent sampling is guided by the emerging categories (Creswell, 1998; Glaser, 1978). Thus, although initially the proposed age range of the participants was between 8 and 12 years, a 7-year-old participant was included in the sample when the need for a younger child's perspective became evident. In keeping with the community-based orientation of the research, all participants were from the 'definite risk' group of firesetters identified by the Edmonton's Child Firesetters Project. As stated in the previous chapter, the category of 'definite risk' is defined by Gaynor and Hatcher (1967) as: "Youngsters who are repeatedly involved in fire play and fire setting activities." Participants were added as guided by data analysis until the point of saturation was reached (Glaser, 1978). Saturation refers to the point at which no new themes are reported (Dreher, 1994; Glaser, 1978). Ten child participants, ranging in age from 7 to 12 years, participated in the study. Table 2 provides a summary of the participant characteristics, using pseudonyms.

Table 2

Children and Adults Interviewed

| Children | Ages | Parents/Guardians |
|---|---|---|
| Ben | 12 | Anita - sister and guardian |
| Chris | 9 | Anita - mother (father in home but declined interview) |
| Cole | 12 | Cheryl - step-mother/ Colin - father |
| Don | 10 | Diane - mother |
| Daylene | 8 | Eve - mother |
| Anne | 12 | Eve - mother |
| George | 12 | Flora - mother (father in home but declined interview) |
| Skipper | 7 | Gina - mother / Marv - father |
| John | 11 | Helen - mother / Henry - father |
| David | 9 | Iris - mother / Ian - step-father |

A letter describing the purpose of the study (Appendix A) was sent by the Edmonton Child Firesetter Project fire inspector to the parents or guardians of children fitting the criteria of 'definite risk for fire setting' who were interviewed during the 6 month period prior to the study. If they wished to participate in the study, the parents were asked to contact the fire inspector responsible for the program or to contact the researcher directly by telephone. All parents who decided to participate in the study chose to call the researcher directly. Half of the 20 families who received the letter contacted the researcher. During the phone call, the researcher gave further information about the study and answered questions. Subsequently, one family decided not to participate in the study because the mother had to be hospitalized. Another family was excluded because the child was only 5 years old. For the eight families who agreed to participate, a convenient time was arranged for an initial interview. The participants were given the option of a home or office-based interview. All chose to be seen in their homes. Each family was paid $25.00 at the end of the interviews for their time. The money was given to one of the parents.

## Method

Qualitative data were obtained from a number of sources. The parent(s) were interviewed in a session which lasted approximately 1 to 2 hours. As well, each child participated in one or two separate interviews of approximately 1 hour each. The interviews conducted by the researcher were semi-structured, using open-ended questions (Appendix B). They were audio-taped and transcribed. During the interviews, the researcher made note of observations not captured by the audiotape. At the end of each interview, the researcher made notes reflecting on what she had learned and what she needed to know. The names of all participants were replaced by pseudonyms and any identifying information was deleted from the transcripts. All tape recordings and transcripts were stored in a locked cabinet. At the completion of the research, the tapes were erased. As well, all names, codes, and addresses were destroyed at the end of the study.

Ethical Procedures. Prior to data collection, ethics approval was obtained from the Ethics Committee, Department of Educational Psychology. Informed consent (Appendix C) for participation and audiotaping was discussed in detail at the beginning of the interview, with emphasis on confidentiality. Participants were informed that I would be available for support, should strong emotions be evoked. If needed, support would consist of crisis intervention, followed by referral to an appropriate agency. As well, participants were informed that they could withdraw from the study at any time. Each child was given the option of choosing his/her own pseudonym for the research.

Parent Interviews. The parents were usually interviewed without the children present. One parent chose to be interviewed in the presence of the child identified as a fire setter and another parent was interrupted by her four children and a niece throughout the interview. The interviews consisted of open-ended questions with emphasis on (a) the child's general history, (b) the child's history of involvement with fire, and (c) factors perceived as influencing the child's interest in fire and subsequent fire setting (See Appendix B for guiding questions). Each participant was also rated by his/her parent(s), using the Child Behavior Checklist-Parent Form (CBCL-P) (Achenbach, 1991). The CBCL-P is a form that contains 118 items that describe behavioral and emotional problems that parents use to rate their child on a scale of 0 to 2. It has long been considered one of the best measures of child psychopathology (Merrel, 1994) and has been used extensively in clinical, educational, and research settings.

The CBCL-P gives T-scores, with a mean of 50 and a standard deviation of 10. A score above 70 is considered clinically significant. A score between 67 and 70 is considered borderline. The checklist was normed on a representative sample of 2,368 children aged 4 to 18. The inter-parent reliability is .76 and the test-retest reliability is .93 (Achenbach, 1991).

Child Interviews. All but two of the children were interviewed alone, with the parents in another part of the house. For the first child not interviewed alone, the father and step-mother sat at the kitchen table throughout, and also asked questions to the child. At times they answered for the child. In the second case, the mother and child sat together on the couch and participated in each other's interviews. The elder sister and maternal grandmother also came in during part of the interview.

For some of the children interviewed alone, there were occasional interruptions with siblings coming in and out of the room and wanting to interact with the researcher. However, their mothers asked them to leave the target child alone with the interviewer. Also, in one instance, a father came in the room to work on the computer in the middle of the interview. Although he wore earphones, his daughter asked him to leave and he complied, after a short time.

The children were asked to answer open-ended general questions about their life, followed by questions about their fire setting activities (see Appendix B for guiding questions). As part of the interviews, each child was asked to respond to seven pictures from the Roberts Apperception Test for Children (RATC)

(McArthur & Roberts, 1982) and three pictures representing scenes related to fire (Appendix D). The three latter pictures were traced from fire education manuals by the researcher. The RATC (McArthur & Roberts) was chosen in order to provide ambiguous stimuli representing common interpersonal situations such as parent-child interaction, family interaction, peer interaction, and school situations (e.g. a man and a woman talking in front of two children). Each card depicts a line drawing of one, two, or three children or a parent-child, two parents and a child, or two parents and two children, all wearing non-dated clothing. As well, in order to provide stimuli representative of various ethnic and racial backgrounds, some of the people depicted were shaded in by the researcher. It was anticipated that the children's responses would reflect their thoughts, feelings, concerns, and interpersonal style (Friedrich, 1984; Sines, 1985).

Administration of the RATC followed the standardized procedure. The 10 cards were administered in the same order and the children were asked to make up a story about each picture, specifying what led up to the picture, what will happen in the future, and to say what the people are talking about and feeling. Responses were recorded verbatim and were coded by theme.

## Analysis of Data

Data collection and analysis are interrelated processes in the constant comparative method of grounded theory research (Strauss & Corbin, 1990). Thus, data analysis began after the first interview was transcribed, by using the procedures suggested by Glaser (1978):

1. The transcribed texts were analyzed to look for concepts in actions, events, and interactions. Open coding was used to categorize and classify concepts that seemed to pertain to the same phenomenon into categories. Properties, causal conditions, and dimensions within the phenomena were also identified.

2. The constant method of comparison was used, by looking for differences, similarities, and relationships between categories and subcategories.

3. As part of the coding, diagrams were drawn and analytic memos were written, recording my thoughts, hypotheses, discrepancies, categories, relations, and questions throughout the research project. "Memos are the theorizing write up of ideas about codes and their relationships as they strike the analyst while coding" (Glaser, 1978, p. 83).

4. As hypotheses were formed about the relationships among the categories, they were written down as memos. The hypotheses were

then tested out in the field, by looking for confirming and disconfirming examples in subsequent interviews. The hypotheses were revised according to the findings, keeping memos on the changes throughout the analytic process.

5. As the core category emerged, the literature was reviewed as an added source of data. The core category was developed in terms of its properties and causal dimensions, in order to arrive at "a plausible and coherent explanation" (Mays & Pope, 1996, p.11-12) of the theory.

6. Bracketing, that is, setting aside, as far as humanly possible, all preconceived ideas, was accomplished by going into the research process with an open mind about what would be found from the participants. As noted earlier, analytic memos were made and a separate journal was kept to record subjective impressions that could bias data analysis. As well, the CBCL-P protocols were not scored until the preliminary analysis of the interview data was completed.

## Reliability and Validity

Dreher (1994) proposed that "the quality, validity and reliability of the data are grounded in the skills of the investigator to establish relationship with the informants" (p. 286). Swanson and Chapman (1994) stressed the importance of engaging the research participants "in a dialogue and being open to their interpretations of the world." The researcher brings to the research process her qualities and comprehensive experience in interviewing children and their caretakers from varied backgrounds and abilities.

Mays and Pope's (1996) criteria for rigor were used as the primary guide for trustworthiness. Specifically, they assert that rigor, whether in quantitative or qualitative research, consists of "systematic and self conscious research design, data collection, interpretation, and communication" (p. 11). Thus, trustworthiness was monitored throughout the research by the following: a) bracketing of any bias or preconceived ideas; b) the formulation of a sensitive question aimed at finding out about the phenomenon under study; c) the use of a theoretical sample; and c) the maintenance of meticulous records along with the verbatim transcription of interviews. A colleague read all of the transcriptions, memos, and codes to look for consistency. A second colleague then read two of the transcriptions after they had been analyzed and categorized. I also attempted to achieve triangulation by acquiring information from a diverse range of individuals, using a variety of methods (Denzin, 1970). Furthermore, I wrote a clear account about how I gathered the information and analyzed the data. This systematic account and the theory generated was written in the form of a doctoral dissertation. Finally, I hope that my integrity is evident in the way I presented the process of my research.

# CHAPTER FOUR

## RESULTS

**What is the phenomenon that results in a child progressing from being curious about fire to setting fires?** In this chapter, non-fire related themes from the parents' interviews are presented first, in order to give context to the fire setting. Once the reader is acquainted with the participants, the process of childhood fire setting is presented, as described by the 11 guardians and the 10 children who participated in this study. The information obtained from the stories elicited by the RATC and additional fire related stimulus pictures are then presented, followed by the results of the Achenbach Child Behavior Checklist, Parent Report Form.

Table 3 is included in order to clarify the order of presentation of the data. A summary of the participants' names and relationships can be found in Table 2.

Table 3

Order of Data Presentation

- Non-fire related themes-parents
  - Family disruptions
  - Learning difficulties
  - Relationships with schools
  - Victimization by peers
  - Apprehension about their children
- Fire histories-parents' perspective
- Fire histories-children's perspective

- Beginning of fire setting process
- Maintaining fire setting
  - Motivation
  - Consequences of fire
- Reasons for stopping fire setting
  - Over the stage
  - Advice to firesetters

Picture stories-results
Child Behavior Checklist-results
Summary

## Non-Fire Related Themes - Parents

In keeping with the symbolic interaction theoretical framework of Grounded Theory, it is important to understand the meaning from the perspective of the participants and to look at their behavior in context (Chenitz, 1986). Thus the first section will focus on the five non-fire related themes that were identified by using constant comparison from the parents' interviews. These themes were as follow: family disruptions, learning difficultiess, relationships with schools, victimization by peers, and apprehension about their children. For the sake of brevity, in the cases where the participant moved to unrelated topics, a series of periods will be used to indicate that the conversation was fragmented by other information, not relevant to the subject under discussion.

### Family Disruptions

11-year-old John and 12-year-old George were the only two children who had not experienced any major disruptions in their household, such as death of a parent, divorce, foster care placement, or being sent to live with relatives. However, John's father works out of town and is away every week from Sunday evening to Thursday evening. George's mother suffers from recurring periods of depression, which she was battling at the time of the interview.

12-year-old Ben lived with Anita, his older sister, and her husband and four children, including 9-year-old Chris, who was also a participant in the study. Ben's mother died two years ago. However, he had been living with his sister and her family since the age of 5, under unusual circumstances.

> Anita: Actually, before she (her mother) passed away, I raised her son and she raised mine. Because I don't know why, he'd (Ben) always want to be with me and my baby wanted to always be with grandma. So she always had my baby, my oldest one (Chris) and I had Ben all the time....He (her son, Chris) actually started to live with my mom at 2. I just took him on weekends. But I still got money (Social Assistance) for him because I still had to buy him stuff.
>
> R: How did he react to your mom passing away?
>
> Anita: Hard, for about a year he was just quiet, you couldn't talk to him you know. Just quiet. It was hard to move back in with mom. He used to come and "I want to go back to grandma's."

* * *

> R: What made him (her brother,Ben) decide he wanted to move in with you?
>
> Anita: I don't know. He just did.
>
> R: How did that come about?

> Anita: It started at 5 actually. I don't know. We lived real close to my mom and he'd be there. I don't know what made him want to live with me.
>
> R: How did he react to losing his mom?
>
> Anita: Not too bad. He cried but it wasn't like you would and Chris (would) in that respect. It didn't really bother Chris like his silence and that was it. Ben was different. It didn't bother him but it did. Actually, since she died and I had him permanently, his grades boosted to A's and B's. And he used to just have C's and D's. I'd send him home and he'd get home and 10 minutes later (pretending to hold a phone next to her ear), "Can I come back?" "Geez, you just left."

* * *

Three other participants had lost a parent through death. For two children, the death was by suicide and one child's father died of cancer. None of these three children were living with the parent when he or she died. 12-year-old Cole's mother was a drug addict who committed suicide when he was 5 years old. When Cole was a year old, Colin left his wife because of her substance abuse. He took the children with him. Cole and his siblings had a number of upheavals in their living arrangements, going back and forth between their father and relatives. Prior to his mother's suicide, Cole was exposed to her rages when she dropped in unexpectedly. Colin reported:

> He'd see her once in a while. There was, there was a few bad things when, you know, like if I, I might have the kids all around having breakfast in the morning or something before school, and she might come barging in all of a sudden. And she's not supposed to be even, you know, we sort of had a restraining order for her to stay away. But she'd come in and maybe

> just throw the whole table upside down, and, and everybody would be scattering, and she'd be trying to fight, or something, and then, you know, but it was violent...

Colin tried to keep his seven children together with the help of his sister and later on, his mother. Eventually the women moved back to a neighboring province, leaving dad with the younger children, including Cole. About 3 years ago, Cole and two of his siblings went to live with their grandmother while Colin worked out of town. They moved back to Edmonton 2 years later, after Colin's marriage to Cheryl, a widow. According to Colin, Cole was looking forward to having a step-mother.

> Colin: I guess he, he must miss his mom because I know he really wanted a mom really bad, and you know, when I got married, well, not married, he was quite happy. But I think he was sort of looking forward to a perfect mother, and one that would give him everything that he wanted, you know, like, his vision, his vision of a mother. But then reality is, you know, you're still going to get disciplined, you still got to do this, you got your chores, you got, you know. And Cheryl's been good too. Sometimes I think she might be too hard on him, but she doesn't know his situation where I feel more softer to him because I know he's been through a lot, and, a lot of stuff.

* * *

9-year-old David's biological father was an abusive man who beat Iris when she was pregnant with David. He too committed suicide.

> Iris: I was kicked from the side here. I was laying on the couch. He just woofed me on the side where I was, when I was pregnant. So I could have hurt the baby. But then I had him, and then 3 months after I had him, I

> couldn't take it anymore. I didn't want to go on with him. I tried to leave. He stabbed me in the back. And so the police got involved, right involved, and they flew me here 'cause my parents are here.... I have a death certificate. I know he killed himself.... It was in 1994 that he did it, and it was just a couple of years ago I just found out through maintenance enforcement...

Ian and Iris were married for less than 1 year at the time of the interview; however, David referred to him as "my dad." When the researcher verified that Ian was the person referred to as "my dad," Iris reported the following:

> He's had a few. He's known a couple of them. I was married before Ian. I was married to Jason's father. That was an abusive relationship. I left his father for his (David's) father 4 months later. I never learned. It was worse. Then, when I got here, I got married again. It was my second marriage. I wasn't married to his (David's) father at all. I got married again to another abuser....

* * *

8-year-old Daylene also did not know her biological father when he died. She had been raised believing that she shared the same father as her older brother and sister. Her mother told her the truth after she left her husband and found out that Daylene's biological father had died of cancer. At the time, he lived out of the country and hadn't had any contact with Daylene or Eve, her mother.

These revelations were not the only disruptions Daylene has suffered. There have been a number of disruptions in both Daylene and her 12-year-old sister Anne's lives. Roland, the man that Daylene perceived to be her father is presently in jail serving a 5 1/2-year sentence for the sexual assault of two women. Roland is portrayed by Eve as a violent man who abused his wife and two oldest children, Scott and Anne. For some unknown reason, Daylene was spared, but she was a witness to the abuse. Most recently, Scott, aged 14, has had to be apprehended by Child Welfare because of his violent behavior towards his mother. His mother agreed to let him go live with his aunt.

> Eve: I think one thing that made it (turning her son over to Child Welfare) easy on me is, I mean, I met my husband when I was 14, married him when I was 18. I was being beat before we even got married. So, I turned around and I married him anyways. And things just got progressively worse. And he made it impossible for me to leave.
>
> R: How did he do that?
>
> Eve: Oh, firing a shotgun at me, beating the crap out of me. I was hospitalized once for close to 2 months. He ran me over with a truck.
>
> R: To prevent you from leaving him?
>
> Eve: At that time, I honestly don't remember. We'd only been married 3 months. Actually, no, a little bit longer than that.

According to Eve, Roland left her for another woman. However, when she started dating a man seriously, Roland became enraged.

> Eve: So then when Stewart and I started seeing each other, and we started getting serious. And as soon as we got serious, Roland broke into my house one night. He was actually jailed then for 6 months plus 45 days because he broke into my house, beat me, raped me, and the whole nine yards.

Daylene and her siblings have also been separated from their mother a number of times because of Eve's addiction to alcohol and two separate jail sentences, one for fraud and the other for arson. Eve said that she was forced to commit the fraud by Roland. She denied having willfully set the fire but admits to having been drunk the night of the fire when she inadvertently dropped a cigarette in her Christmas tree.

> R: And the girls, you said they've been in and out of foster care quite a bit?
>
> Eve: Yea, well, the same as their brother. Like I said, they were living with me, then they were put into foster care. They moved from quite a few different homes. Then they were placed back with their dad. Then they lived with his parents. Then they moved out to (out of town). And then they came back to me.

* * *

At the time of the interview, 7-year-old Skipper's parents, Gina and Marv were going through a divorce. However, her father was living at their home temporarily. Mother's fiancée, Lisa was also sharing the home.

> Gina: I got married 5 days after I turned 18, had a child, we're in the midst of a divorce right now, but it's not messy, so I told him he could stay here a while. We're still friends.
>
> R: And that's this gentleman (designating Marv)?
>
> Gina: Yea, that's Marv. And Lisa is my fiancée, um, because I came out of the closet in March....Lisa proposed to me in June, um, last year in '97,

> oh, '98, pardon me, and I accepted. Skipper was living with my aunt and uncle for a while, for 6 months. The beginning 6 months last year.

* * *

Unlike the other participants, 10-year-old Don chose to break the contact with his father. He had had enough of having his dad drop in and out of his life with prolonged absence in between visits.

> Diane: His dad, you know, used to come in and out. Maybe once a year. This last time, Don put his foot down and he says he doesn't want to have anything to do with his dad any more.

* * *

In summary, parental loss was a common theme among the children. For a number of them, the loss was due to traumatic events such as suicide or incarceration. Furthermore, some of the children experienced a number of losses and some were witnesses to parental abuse.

## Learning Difficulties

The most prevalent learning difficulties identified by parents was Attention Deficit Hyperactivity Disorder (ADHD), characterized by difficulties in attention, impulse control, and activity level. According to the parents, seven of the participants had been diagnosed with this disorder. Two of the participants were diagnosed with Fetal Alcohol Syndrome, including one of the boys diagnosed with ADHD. Nine of the children experienced academic problems, ranging from academic delay in only one area to academic delays across all areas. The only participant who was functioning at grade level academically was diagnosed with

Tourette's Syndrome and ADHD (see Table 4). As may be seen in Table 4, children in this study experienced significant problems with learning and modulating behavior.

Table 4

Learning Difficulties *

| Name | Parent(s) | Difficulty(ies) | Educational Placement |
|---|---|---|---|
| Ben | Anita | F.A.E., ADHD, slow learner | Adaptation class |
| Chris | Anita | Slow learner | Adaptation class |
| Cole | Cheryl/Colin | F.A.E., ADHD, slow learner | Integrated Occupational Program |
| Don | Diane | ADHD, difficulties in all core subjects | Regular class (Resource Room support – until grade 6) |
| Daylene | Eve | Behavior problems | Behavior Disorder Class |
| Anne | Eve | Delay in language arts | Regular class |
| George | Flora | ADHD, academic delays in all subjects | Regular class |
| Skipper | Gina/Marv | ADHD, academic delays in all subjects, vision problems, language disorder, awaiting testing for hearing disorder | Regular class with teacher assistant, on waiting list for Special Education placement |
| John | Helen/Henri | Tourette's Syndrome, ADHD | Regular class |
| David | Iris/Ian | ADHD, reading disorder | Behavior Disorder Class |

* Information provided by the parents.

## Relationships with Schools

Talking about the children's school experience invariably led to the parents commenting on their own relationships with their children's schools. All except one of the parents shared negative feelings about the schools. Some of them were quite hostile in their attitude towards the schools. Flora, George's mother, had a number of complaints about the school her three children attend.

> Flora: I'm not really sure what they're doing this year. I have just sort of disassociated myself with anything 'cause I'm just fed up with the school system and everything. So I've just let it kind of, you know, if they call me, and there's a problem, or if they ask me to help, then I help. Otherwise, 'cause he clashes with homework and stuff all the time, so I just ask him if he's got it. If he's got it. If he's got it. If he says "no", well, then it's his marks that go down the drain.

* * *

> Flora: I think the worse stress we have is the homework. Like, the school stuff, 'cause all my kids struggle so much in school. That and fighting the system and things like that have got to be the hardest.
>
> R: You mentioned earlier that you had quite a hard time with the school that you kind of gave up on them. What's been the problem with the school?
>
> Flora: Well, for him (George) it never seemed like they would get the right help for him because he didn't qualify for that funding thing, and they just, they just, last year, they just kind of figured that he should, you know, just get up and sort of do better than what he was doing....And same with Liz (daughter with a disability). She's always had funding, but I don't think she had the right help either.... In November or October, the teachers

didn't even realize this (nature of Liz' disability).... So it's always having to go over it again, and again, and again.

R: You're having to educate the teachers each year.

Flora: Yea. And I just find that so frustrating 'cause, like, you know, it should be in her file 'cause, I mean, she's got, like, she's special needs, so they should be reading those things, and you know, it seems like by the time they get a grip on it, it's the end of the year already. It's just I find, I just find it a big stressor.

* * *

Flora: This boy was at school, they were, (they) had a lighter at school. They got caught with matches at school last year. George wasn't there, he was away from it, but he still, I still got a phone call about it. And George had nothing to do with it. But I got a call from the school.

R: Why?

Flora: Because he was in the vicinity. George couldn't do anything right last year.

R: At school?

Flora: Yea.

* * *

Anne and Daylene's mother, Eve, expressed resentment about the lack of communication from the school. She didn't approve of the way they were handling the children.

Eve: To me, that school has no, what's the word I'm looking for? No connections with the parents. There's no communication. I've gone into a major case conference about my girls. I've been there, (family support worker) was there, my social worker was there, (son's youth worker) was there. And we had all of the teachers in there, and went into a major case conference, and I said, "O.K., this is what I need. To know that my children are in class; this is going on; that blah, blah, blah, blah." I still get nothing from them. Nothing!

R: It's discouraging.

Eve: Yea. It is. No, even just after that case conference. We had one here with all the workers and everybody just a few weeks ago, and even (social worker) said, he said, "Eve, is still not getting any cooperation from the school." Like, he's been sitting here one afternoon, a good example. Anne skipped, I got a phone call at 3:15, when school's being dismissed, to tell me that Anne hadn't been there all afternoon.

* * *

Eve: Daylene is in a classroom for children with behavior disorders. She has never been diagnosed with any type of disorder, and actually her behavior at school is the same as the children in her classroom because she follows them. I feel if Daylene was to be put in a normal class, she'd be fine. And unfortunately, if I even try to move her to another school right now, her file would go with her and they're going to say, "Okay, this is a bad kid." Well, she's not.

* * *

Anita, Chris' mother and Ben's sister, reported that she used to drop in at school when she felt like it. However, she hadn't been at school at all in the 5 months prior to the interview.

Anita: I haven't seen his (Ben's) report card yet. Oh, yea, he did good. I didn't see Chris' yet. Teachers won't send it so I'm going to phone them.

R: How come they won't give it to you?

Anita: They won't give it to him to bring home. So I'm going to phone there and tell them either they send it or I'll go over there and rip it out of her desk. 'Cause I think I should see it.

R: Well, I would think they would give it to you unless they want you to pick it up so that you can meet with the teachers.

Anita: No, I don't want to meet the teacher! I met her before. She's been there for 3 years, so I've seen her.

* * *

Don's mother shared that a former principal used to mock her son. She dealt with the situation by moving to a new neighborhood.

R: What was that all about?

Diane: I don't know. I couldn't figure it out. Umm. The only thing I could think is, umm, because he's Metis….I was glad to move away from that area.

R: You weren't happy there?

Diane: I wasn't happy with the school.

She was much happier with the next school, a small inner-city school with a great deal of support.

Diane: The teachers there, because of the new classrooms were smaller, they really had a lot of time to help the kids and give one-on-one instructions. And he was an "A" student.

* * *

Skipper's mother wanted a special education class because she felt the present school did not know how to handle her.

Gina: The school's always sending her home and anything she does, 'cause we live so close.

R: So when she misbehaves, they send her home?

Gina: Yea. See, she is a difficult child to deal with. Because, even with the Ritalin, it still sometimes doesn't work. And she's in a big classroom. She needs individual care or a smaller classroom. 28 kids in total. And because she's up and down all the time, they don't exactly help. Because at XXXXX it would have been better because they specialize in teaching to that.

* * *

John's mother, Helen was upset with her youngest son's teacher last year when the teacher suggested that John was bothering his younger brother, Scott.

Helen: The teacher said to me, we go for our parent/teacher interview, and she's really concerned. And she said to me, "Scott tells me that his brother really bugs him, and he really dislikes him." And I thought, "Wow, that's like, out of character. That has nothing to do with you." So I was a little offended, and I thought, "Okay, is that affecting his learning? If it's affecting his learning, I'll respond to it. But if it's not, you'll stay out of it."

* * *

However, there has been improvement in Helen's relationship with the school. Last year, she considered transferring John to another school. However, the school administration convinced her to leave him at his present school, which he's been attending since kindergarten. She perceived their reaction as a sign of growth in their understanding of John.

> Helen: When we had problems with him last year, we wanted to switch him to a different school. The principal said, "You know, I know that it's not always rosy, but we know him here." And even the vice principal said, "We know him. To start at a new school where they don't know him, they're starting all over again with the problem and it doesn't necessarily mean they'll be better…Now we can read him a bit more." And it's true, 'cause they see a different side than at home, you know… Actually, I was quite surprised, I thought, "Geez, maybe they are learning!" You know, because a lot of them are very, not narrow minded, but they're so tired of the disruptions, and it's that again, you know. So I think now, it's kind of, like, the inroad, you know. That when another one comes up, they'll know how to handle it.

* * *

David's parents communicated with the school through a daily communication book. His mother, Iris, had convinced the teachers to introduce phonics to his reading program. She frequently spoke to the teacher, usually on the days she picked up David from school so he didn't have to ride the school bus. However, she hadn't been able to persuade the school to discharge him from his special education program.

> Iris: He's been in (a behavior disorder class) ever since (he was transferred to that school), and I'm hoping this year, we can kind of integrate him. See, in YYYYY School, they were integrating him in art, something easy, and he did well when he went. But there are certain days, he didn't want to go. I'm not sure the reasoning why. But I want to integrate him. I want him to be in a normal class. I don't think this is right.

* * *

In general the parents described tense relationships between the schools and themselves. Some of the parents felt their children were misunderstood and mishandled by the school personnel.

Victimization by Peers

Parents frequently mentioned that their child was "picked on" at school. Some of the participants had even missed school in order to avoid the teasing or bullying. Three of the families were contemplating changing schools.

> Flora: He's having problems with the kids at school. He come home the other day, stayed home last week, said he was sick, but he stayed home 'cause he was having trouble with kids on the bus. Kids teasing him. Teasing or something. Picking on him, he said. (Two boys from elementary school) are kind of big buddies, and they pick on George and they were teasing him about his Ritalin, and everything, so we went to talk to the vice principal, and the vice principal talked to the boys, and Sean has only been to our house once, so I think there's something going on there, too, 'cause all of a sudden, he doesn't have his buddy Sean with him. But Sean's always been kind of mean to him, you know. He'd hit George, and George would just take it, and, you know, they'd been friends since kindergarten.

* * *

David was another participant who was victimized by his friend. His mother and step-father, Iris and Ian were concerned because he was abused by all the boys he tried to play with. David tried to solve the problem by seeking out the company of girls. However, the last time he befriended two girls in his neighborhood, they hurt him. Iris and Ian related different instances in which David was victimized.

> Iris: That's the way he is. One day they're friends, one day they're not. They've had a fight. So it's very hard for him to make friends.
>
> Ian: Want to see a kid with a mean streak! David and him had a little fight, and this little 8-years-old, well 8-years-old at the time, never seen a kid that age actually boot another child in the privates the way he did intentionally, trying to hurt.
>
> Iris: David almost collapsed outside here on the side.
>
> Ian: Just the other day, his first day out that he's played outside all winter, and he was across the street with two girls, over at the park.
>
> Iris: And he just loved them. Until they, they tried to poke his eye out, or something. I'm not sure.
>
> Ian: They threw a stick at him.
>
> Iris: Oh, that's what it was. Oh, yea, it hit here (pointing to the corner of her eye). That's right, he come home crying, "I'm not playing with them girls anymore!" "Well," I said, "don't ever get two against one, then."

* * *

The violence and teasing was also directed at the girls. Daylene, and Anne's mother, Eve commented on the abuse her daughters were experiencing at school.

> Eve: I got a phone call from Daylene's teacher right around lunch hour, and he said, "I think you should come pick up Daylene. " And I said, "What now?" And he goes, "I think she may have sprained her arm." And I said, "Okay, I'll be there ASAP." So, I phone my mom, and we went and picked her up, and I thought rather than go straight to the hospital, I take her in to my family physician. So, then we got to my physician. She had actually been hit hard enough in class, by one of her classmates, her arm was fractured in three different places.

Eve shared that her other daughter, Anne, had to be walked to and from school to ensure she didn't skip school. According to Eve, Anne was excited when she woke up with bronchitis because she could miss school. According to Eve, the children do not perceived the teachers as being effective in stopping the bullying.

> Eve: She's (Anne) skipped school twice, and she said it's because boys are calling her names. So, what I try and get into her is, you can't let these boys control your life. If you're having a problem with that, you go to the principal. "Well, they won't believe me." So I've had to go to schools on several occasions.

* * *

Colin, Cole's father, shared the perception that schools were ineffective in stopping the bullying.

> Colin: They're on his case. It's, it's, he has, he had quite a few friends, and then all of a sudden all his friends seemed to turn against him, and

> then he's having trouble with the kids at school. Cole, see, he'd get in trouble at school, or the kids were going to beat him up after school, and I told Cole, "if you have any trouble, go to see the teachers." But Cole said, "They won't help. They don't, they don't do nothing, or they're not, you know, I go to see them, but they don't, they can't do anything about it." So, you know, that's more what I mean, not that they're on his case so much, but maybe they weren't really aware of, of how, where he's at.

* * *

According to Diane, while Don was not physically abused at school, his classmates set him up to get in trouble.

> Diane: He really struggled with some of the kids there. (Turns to Don) Didn't you tell me you would get blamed for certain things? And they were accidents.
>
> Don: Oh yeah. And like, I accidentally stood behind, stepped on kids' fingers. They deliberately put it there and I'd go to time-out in my room, and get in trouble by the principal.

* * *

Sometimes, the children retaliated. Cole punched one of the boys who had been teasing him and threatening to hurt him. He may have broken the boy's nose. Skipper was teased by other students. Her mother told her to fight back so she did.

> Gina: She hit a kid in school today. But she was saying the kid was teasing her.
>
> Skipper: No. I said the kid was trying to trip me.

> Gina: Oh, pardon me. Trip her, but like I've always taught her to stand up for herself and I think that's only fair….And kids do tease, you know, they tease kids all the time you know.
>
> Skipper: But Susie is the only one who teases me.

* * *

> Later on, Gina mentioned that Skipper was not "mean by nature."
>
> Gina: She's very good hearted and she tries to do good when she can….But because of how active she is, and she does end up breaking a lot of things, she's lost a lot of friends because of that, you know.

* * *

Although John, who has Tourette's Syndrome, often complains of being picked on and unfairly blamed, his mother, Helen perceived the reality differently.

> Helen: He says, " it's always me. It's always me, it's never them." And before, I used to, not make excuses, but I'd say, "I know how you feel, and I know it's tough." And now it's like, "No, you're only seeing you in the picture, that's why. There are other students, or other teachers. It's not the way it is. And, if that's the way it is, you have to handle it." He could have hit the kid, and the kid fell down, but if you say, "John, what did you do?" (He says) "I got blamed for nothing."

* * *

Only one participant, Ben, was not the victim of teasing or bullying, His younger nephew, Chris, raised as his sibling, was not as fortunate until his mother intervened on his behalf.

> Anita: He tried to get along but kids would pick on him…then I got a reputation in the neighborhood that I was a mean mom so he had lots of friends after that.

> R: You stood up for him and they backed off.

> Anita: Yea, like one time the kid was trying to play with them. They took him. They pulled his hair on each side. So I ran out there and said, "Don't you ever pull my son's hair!" And I took their hair and started pulling it too.... But I know that's not a good thing to do but when I get mad (shrug)… Something goes wrong with my kids, I just, I get mean.

In summary, all but one of the participants were perceived by the parents as victims of bullying. Congruent with the tension between home and school, the parents did not perceive the schools as handling the bullying effectively.

Apprehension About Their Children

Many parents expressed apprehension about their children. While many of their fears centered on the children's propensity for repeated fire setting, they also expressed more generalized fears that were not related to fire. Colin, who had been a single parent until his marriage, one year prior to the interview, was very apprehensive about his youngest son Cole. His wife, Cheryl, shared his apprehension.

> Colin: …when you're asking him about these things, when you, you know, "Are you going to do this again? Are you going to do that again?" Or, that, you know, for like, setting fires, he says (shrugs). I want him to just tell me that he'll never do it again, but he says, "I can't say that." He does have a lot of problems, and…

Cheryl (interrupting): Umm, really struggling, you know.

Colin: And how can we get him through, I don't know, but I just, you know, I try to picture him, you know, a few years from now, hopefully he's got through all this, and he's on his feet somehow, but I don't know how he's going to do it either, like, you know, getting his grade 12. I can see he'll never get it. In fact, he'll be lucky if he gets grade 9, and then that's going to put him in another, more problems trying to deal with, you know, getting jobs, and working, and he's a good worker.... So it's always in the back of your mind now that, you know, these things are going on, what else could he be getting into, or whatever....

* * *

As concerned as he was about the potential for further fire setting, Ian was particularly concerned about David's lack of control over his anger when he's in a bad mood.

Ian: It just scares me if he goes into adulthood like that, there's got to be a control on the, on the anger.

* * *

Diane also expressed her concern succinctly, " sometimes he reacts without thinking."

* * *

Eve's concerns were that her children were so afraid to be placed in foster care again that they were not being honest in therapy, which blocked their progress.

> Eve: I find with my kids, though, they need to be more open and honest. Like, I find, maybe I yelled at them and they'll sit in there with (family therapist) and say, "Everything's going great." And I say, "No, it's not, tell them the truth, what happened."
>
> R: So they're protective of you.
>
> Eve: Umm. They don't want to ever be moved out again.
>
> R: They're afraid that even normal behavior, like mother getting mad might have them separated from you.
>
> Eve: Or vise versa, with them getting mad. They're afraid that that will have them pulled out.

* * *

Flora was optimistic that her 12-year-old son, George, no longer posed a fire danger. However, she was so concerned about the frequent arguments she was having with 12 year-old George and the arguing among her three children that she made an appointment for family therapy right before the interview. She said, "It's mostly him knowing when to quit, I'd say. He doesn't know when to give up." She described the family atmosphere as "not so good."

> Flora: It seems tense all the time. It seems like it's always on the go. But like I say, this place is so small, we're all crowded, like, on top of each other it seems.

* * *

Similarly, Helen expressed concern that her 11-year-old son, John, did not know when to stop. At times, she found it exasperating.

> Helen: John doesn't know when to stop…. He always has to get the last hit, too. "I always have to be last. I hit you last. I tease you last. And I have to win." So, so I kind of, you know, kind of tell John, "You have to, you have to show, you have to be the leader now. You have to show the example. You have to learn to stop first, you're older." So I think that's where we're at now, you know. Good days, bad days. You know, good days you can hope. I think we're going to make it, and then you have a bad day and it's like, "Why was I thinking that? Oh my gosh!"

* * *

In summary, some parents expressed apprehension about their children. While the apprehension was mostly related to impulsive behavior and sibling rivalry, one parent expressed concern that her children's progress in therapy was impaired by their fear of being returned to foster care if they expressed any negative feelings.

## Fire Histories-Parents' Perspective

The following section presents the parents' descriptions of their children's fire setting history.

The fire inspector contacted Anita after the family home caught fire. She was certain that neither her son, Chris, nor her brother, Ben, started the fire. However, she related that when the firefighters asked her if any of her children had been setting fires, she replied:

> "Yea but they didn't start that one." "Well there is somebody we can get to contact you, whatever." I just told him they liked to go start fires. They start fires out in the grass in the summer. Or, one morning we were sleeping. It was about 7:00, 8:00 in the morning and we hear beep, beep, beep, like

our alarms were just going off. What the hell? We were looking around the house. Couldn't find anything so we ran downstairs. There was smoke all over, where it was coming from. I went into the bathroom with Rick and there was toilet paper all burnt and of course the boys are laying in bed and pretending to be asleep. That scared me. They had toilet paper everywhere all burnt. And my other one, not long ago took my lighter. I couldn't find my lighter. Ben, my brother said that he had it in the park, trying to set a fire in the bushes like and Ben caught him and tried to get the lighter. But he heaved it so he couldn't find it.

R: Is it all three boys then that are into it?

Anita: Well, the oldest one (Ben) started. He's not too bad now but he does start fires in the grass like, last summer. Then there's my oldest son (Chris) who likes to play with lighters then he takes his little brother (Jack) along and he follows…. My lighters walk away and I have to go buy a new one and then that one will be gone and it's like, how come my lighters keep walking away? And then I will find them. They'll be on the fridge and like how did they get there? But then, of course we know. Of course no one knows and "I didn't do it."

R: What have you done to try to stop him in terms of the fires?

Anita: Well, we'd throw him in the bedroom and there'd be fire and rugs burnt. "Do you want that (house fire) to happen again?" and that sort of thing and "We'll have no home." (Shrugs)

R: And that hasn't worked. Anything else you've tried?

Anita: No. That's the biggest thing, letting him know the consequences. Well, there's the news. I don't know. Maybe it just don't sink in or maybe he thinks it won't happen to us. Almost did once, sleeping in that room.

> That room that went on fire....The fireman thinks a cherry (of a cigarette) might, someone might have dropped a cherry, because when the fire was going, like I was sleeping and I was like laying there and then I was like "Is it hot in here?" And you're kind of sleeping and he said "Yea, turn the fan on." "Okay," I said and turned over and, "Oh my God," he said, "There's a fire!" We could hear the beep, beep, beep, but we didn't think anything of it. We thought there's something clicking. But, and then I think what made the fireman think it was the cherry, was the smoke, cause when I jumped up, I grabbed my blanket and hit my end table and my ashtray went flying right for it.... A week or two later, this one here was having a little grass fire. Enjoying a little grass fire. I don't know why he likes to set my grass on fire. I don't have very much. The kids play hockey or whatever in my yard and he did two of those. One outside the fence (before the house fire), one inside the fence (after).

* * *

Initially, Colin wasn't concerned about Cole's interest in fire. He perceived the interest as a normal part of child development.

> Colin: I don't know when the fires really started. I know, you know, we'd go camping, or something. He'd like to play with the fire, put sticks in the fire, but most children are like that. They want to put a stick in the fire, so we didn't really think too much of it in his, you know, younger years. But it didn't really come to our attention until, until he's set a fire to this outdoor bathroom, sort of a, a plastic, what do they call them? Johnny-on-the-spot at the park. And then, sort of that was our first incident, really with fires that we really sort of brought to our attention that there might be a problem there.
>
> Cheryl: Well, (fire inspector)'d asked him, he said, "Would you classify yourself," like, I thought it was only maybe two or three times, and he said

> to Cole, he said, "How many would you say, 30 to 20?" And Cole said, "No, lower." He said, "20 to 15?" And Cole said, "Probably." So that's how. And I think he also started, or went to start somebody's garage on fire. But the guy caught him, or put it out.
>
> Colin: I never heard about that.

* * *

It also took a while for George's parents to discover that George was setting small fires.

> Flora: We discovered something black in our bedroom. And we, after a long discussion, we come up with that he had been playing with matches in our bedroom. And apparently he had tried lighting a Bounce (fabric softener sheet) on fire. And he must have put it out, and then I, just the remains of black, you know and a little burn mark on my sheets, was on there, but he must have been able to take it off.

* * *

Skipper's mother had formulated some theories about Skipper's apparent fascination with fire.

> Gina: Skipper and fire. I don't know whether it's just that she's playing with matches and trying to heat chips up over candles.... Because she had started playing with matches, um, this was in '96 – '97. Late '96 or early '97. Um, playing with matches and, you know, just more like curiosity and playing with lighters and she had started some papers on fire and burned a couple of holes in a couple of quilts....She was living with me and my foster mom, 'cause I'd moved back down to (south).... Initially it (fire setting) was because she had been sexually molested (by aunt's boyfriend)....So, for Skipper, it was her way of lashing out. But she didn't

know that it wasn't right. She didn't know that she could come talk to me....Like when she was about 2 1/2, 3, she got curious about with us smoking and what not, um, smoking cigarettes and stuff, and you know, so playing with matches was just kind of first curiosity and then, you know, when I told her, "No, you can't do that." And I got her a couple of books and a couple of videos. You know that Little Old Lady in the Shoe bit. And it goes "Swoosh!" As corny as it is, it teaches kids a lot. And um, see, you know that it stopped for the last time for quite a while. I think that's when Marv (Skipper's father) was over at his parents' place. She was again caught playing with matches and trying to set bonfires, 'cause down in (south), a lot of people have bonfires or backyard fire pits. And so she decided she wanted to do (set fire to) one of her own for her toys.

R: How old would she have been then?

Gina: Um, about 4 1/2, 5. Yea, just turned 5. And then she started again at 5 1/2, and so it's like, okay, after the repetitiveness of this, we went to the fire marshal and he sat and talked with her and we had one of Lisa's friends, who's a psychologist, come and talk to her. And she said she's lashing out because she was upset that dad was calling all the time, and having to move and stuff. You know, so it's understandable, but. You know, actually, she hasn't played with matches now since September.

R: So the talk with (fire inspector) has seemed to help?

Gina: Yea, because he came and did a big talk with her and then the school, just shortly after, not because of Skipper, but because every year they have fire people come in and show videos and stuff in the gym of the local school. They were there, like 2 weeks after. And so, you know, that helps and we show Skipper what it can do. Like one of her drawings that she really took pride in, I said, "Unfortunately it's the only one around to show her." So we have a barbecue pit out back and what we did is, we set

> it in there and we showed her, you know, we lit it on fire. You know, and said," Hey, this can happen, you know, if the kids were sleeping and you're playing with matches or playing with lighters." That we're being more careful about making sure we put them up when we're, you know, when it's bed time and keeping matches out of her reach. Because the last time that we caught her playing with matches, we were all getting ready to go have supper.....But I was taking a shower, Lisa (Gina's fiancée) was just getting Skipper's clothes ready for us to go out, and Skipper had had her bath just prior to mine. She went into our bedroom and decided she was going to light the candle. Well, she left the candle burning. She's like, "How did you know?" First of all, I can smell smoke from a mile away-being allergic to it helps and that means "candle left burning." You know, we told her that, "What would have happened if we had gone and," you know because we had the window open and the curtains, "what happens if we would have gone and the wind would have blown the curtain over the flame? Whoosh, we would have had no house left....You would have lost your bed, you wouldn't have had no toys, nothing." So, you know, that's when I talked to (fire inspector)...

* * *

John was only 8 years old when he set the house on fire. The fire caused extensive damage to their home, necessitating the rental of a house while theirs was refurbished. Subsequently, John was diagnosed with Tourette's Syndrome.

> Helen: In November '95 he set, I was at work, on my way home, and they came home alone. So, he went downstairs, and I guess he grabbed a birthday candle that was in the cupboard, and he went down in the crawl space, and there's a lot of stuff. And he lit it, and then he said he blew it out, and then he left. So I'm not sure. The fireman thinks that he dropped it, and it started, there was a comforter there. It started smoldering, and

> then that's a fire. So anyway, after that, the fire, (fire inspector) came. He came to our house and he showed us the, he showed us the film, and just to check, and then, that's when he started asking how many times he's played with matches. And John said, like, eight. Eight times that I hadn't been aware of. … So then (3 years later) he was playing with his friend, and that was last June, 'cause I'm sure they were still in school. So the neighbor brought him back, him and Steven, and said they were lighting the field on fire. So, oh, my gosh, it was dry, and it hadn't rained. So that's when I called (fire inspector) again, and I said, "I'm just following up, I'm not quite sure what to do. Is it a danger sign? Is it all the time?" So he says, "Well, I'll come over."So he come out and he showed a film about the teenager in the States being so burnt when he was little. So then he interviewed John again, and he said, "Have you been playing with matches?" And John said, "No." He said, "Are you interested?" And John said, "No." … "We were going to stomp it out." So then the consequences don't come in. He doesn't realize the consequences, right. Whether it's because he's 11, whether he has Tourettes, or whether he just doesn't want to.

* * *

David's fire setting was causing a great deal of concern to his mother, Iris and step-father, Ian.

> Iris: He's always had (fascination with fire), periodically, like, just in different times of his life.
>
> Ian: It's impossible for us to burn a candle in the room, like, we like the smell of candles, but it's really…
>
> Iris (interrupting): We're people that don't smoke. My parents don't smoke, so we do that, kind of air it out, you know. You can't leave a candle in a room with him unsupervised 'cause he plays with it. Gets a toothpick, you know, his mind's up.

After a general discussion about their two children and their family life, Ian and Iris were brought back to the topic of David's fire setting.

> Iris: Well, when he was 2, he, 3, gosh, it's when I was with Dennis, anyway. It started when Glenn (David's ex-step-father) and I were together, and I think that was rebellion. He burnt the back of my couch. He was going to burn everything down with Glenn in the house one day.
>
> R: Did he say that that's what he was going to do, or?
>
> Iris: No, no. It wasn't outward like that. But I think it was always after an argument, or some, some time, when Glenn just wanted him out of the way. He'd pull him by the arm and throw him in the bedroom, and kind of that way. And he just built up an anger.
>
> Ian: I don't think it's just an anger thing, though, because we have a fire pit out back.
>
> Iris (interrupting): It's a, it's a fascination.
>
> Ian: And he, he cannot leave that fire pit you know. And if you're going to have a fire, there has to be somebody out there, otherwise these kids will play with it (David and his 14-year-old brother).
>
> Iris: Both of them
>
> Ian: You know, Jason will make torches. And David will be burning whatever he finds in there, you know.... That's the cabinet he burnt. He took it apart. With those little, that's the cabinet he burnt, the plastic one.
>
> Ian: Oh, I thought it was something else that burned on to it. Like, he was burning something and it dripped on to it. I don't know.

> Iris: Well, I don't know, but it burnt. That's why he took that cabinet thing. It was just a little, little plastic roller thing for books. And he had taken the lighter in there some time, and while I was doing laundry, or I was down there, he, I was in the bathroom. No, when we were doing our thing. He had taken it in there and he burnt, I could smell it, he could smell it. So we went in there, and it's like this, kind of thing, right, and "What are you doing? Why do I smell fire?" Then you'd look, and you'd, you could see it. "What were you doing that for?" Like we had those wooden skewers, you know, to put meat on for kabobs, and he was taking that and burning it, and see how, how long it would burn, you know. Then he had it touch things, and that's how he burnt that cabinet. I just thought of that one, why he took that apart and wanted to put it in the garbage.

Ian and Iris have tried unsuccessfully to find out why David sets fires. They've discussed it together and have asked him about his motivation.

> Ian: He doesn't go into that. He won't, or you don't want to push him or pry too much 'cause he'll just shut down completely. But when you do try to pry, he shuts those sort of details out, like, what would make him do that, you know, like. I'd almost call it a pyromania fascination the way he will sit at the fire pit for, if you're out there with him, for hours, just poking, and like, I don't let him make pokers, and we have one poking stick for roughing up the coals to put the coals to put more firewood on, or something. But they have this habit, they'll go get a stick and try and burn it, you know, and think of that as playing with the fire.

* * *

Unlike the other parents, Eve was convinced that her daughters were only involved in one deliberately set fire and unjustly accused of another. Both of these fires were set at the school the two girls were attending. She was aware that they had been hiding matches in their drawers but believed that the matches were only used by her oldest daughter, Anne, to light the cigarettes she had been sneaking. Eve reported that she herself had been incarcerated a few years ago for arson, from what she described as an accidental apartment fire.

> Eve: Actually, the first fire that my children ever lit, and I think it was by accident, and Daylene wasn't even born yet, but it was Scott and Anne, and I don't recall how old they were, but I was still with my husband. And we lived in the house just up here on BBBBB Ave. And I was in the shower, and we had a gas stove, and Scott and Anne set a loaf of bread on it. Well, the little flame underneath, it ignited the plastic. Well, by the time I got out of the shower, the walls were on fire, and everything, and I put it out myself. And I didn't really reprimand the children for it 'cause I wasn't sure if they knew what they had done or not.
>
> R: Umm, they were quite young.
>
> Eve: Yea. And then up until recently, like with Daylene in school (referring to recent behavior problems), I haven't had any problems with them playing with fires. Like, if they've ever played with matches, or something, in between, I'm not aware of it. Then, both the girls were caught up here on the schoolyard. They were with four other children, Sharon, Darren, Bert, and some other kid named Peter. Sharon admitted to lighting the fires, the girls admitted that they had no intention of putting it out. They didn't put it out until a bunch of people ran out and saw them. And like I say, I've caught them, well, I told you (on the phone) about the empty matchpacks up in their rooms. But to the best, like, the fire that happened in the school, that they were originally investigated for, like, I know for a fact that the girls didn't do it. I was with them. I picked them up from the school day. And actually the four children that were originally under suspicion was Leslie, Tessa, Daylene, and Anne, and all four of

those girls were with me, so (shrugs). There was a bunch of stuff hanging on there and that was lit. And actually, even my son was also accused of doing it, and he helped put it out. And plus there was some misinformation. They had told me in this, during this meeting that they had confiscated a lighter from him, and then I think one of the investigators…he came out and apologized to me. They had got the information wrong, and it wasn't Scott they had taken the lighter from, it was another kid, so.

R: And to this day, you don't know what happened, or who did it, or anything, or why the girls were accused?

Eve: No, they aren't any closer to finding out. Well, I know why they were accused, it's because the fire in the school yard. It was just a few weeks before the fire in the school. And I went to the school after the school yard incident happened, and I told the principal, "If there's any investigation to a fire in the school yard, my girls were there, they were involved….My girls definitely aren't saying spit. Like, I know exactly what happened, and if there is an investigation, you know, you know that my girls were there and involved." Actually, I was really upset about this. The other parent of the one girl, and the two other boys who were there, had told me she was going to all these extremes with the kids. Like, I walked to her house to get my girls 'cause they had spent the weekend there, and she was going to have her daughter suspended from school, and everything. So she was going to meet me at the school on Monday morning. She didn't show up. She didn't phone me, nothing. It was, like, you know, if you were really concerned for your kid's well being, you would be there and address the problem, not just ignore it.

* * *

Diane let her son, Don relate his fire setting experiences to the researcher. The two of them were interviewed together and at times, interjected a few comments in one another's conversation. They were in agreement about Don's report of the fire setting experiences. Don's story may be found in the child participants' section.

* * *

To summarize, in the parents' description of their children's fire setting history, one hears a wide variety of parental reactions ranging from disbelief, to quick reactions and mobilization of outside resources, to defensiveness. According to the parents, fires were set with matches or lighters, combined in some instances with items such as toilet paper, candles, and wooden skewers. The damage caused by the fires included burned furnishings, grass and bush fires, destroyed outdoor structures, and extensive house fires. It was rather striking to note the easy access of matches and lighters in some of the homes visited, given the fire setting concerns. In many cases, these items were left on the coffee table or within easy reach. Seven of the children lived with at least one smoker and two of the children who lived in non-smoking homes had parents who regularly burned candles.

## Fire Histories - Children's Perspective

The following section presents the children's description of their fire setting histories. It is divided into three sections. The first section is about the beginning of the fire setting process. The second section deals with factors the children perceived as maintaining fire setting, and the third section describes their perceptions about stopping the fire setting behavior.

### Beginning of Fire Setting Process

Most of the children were willing to share their memories of how they began to set fires. They reported the events in a matter of fact manner. These are their stories, told in their own words, except in cases where clarification is needed, where notes are added in parentheses.

As noted earlier, George is a 12-year-old boy who has been diagnosed with Attention Deficit Hyperactivity Disorder. He also has learning problems but doesn't qualify for a special education placement or additional funding. He was only 5 when he set his first fires.

George: I think it's just curiosity that caused it.

R: You were curious.

George: Yeah, see which things burned more, faster than others.

R: Yes. So that's what you were doing, little experiments?

George: Yeah.

R: What did you use?

George: Matches mostly. And if I could get them, lighters.

R: Where did you find these things?

George: Sometimes, nowadays when I was 11, last year, I looked in these, these thingies, looked in my mom's room, found a lighter once in her room, and burned her lipstick stuff but it didn't burn.

R: So you tried the experiment with the lipstick.

George: Yeah.

R: What else did you experiment with?

George: Eye shadow sometimes. The bouncy thing (Bounce fabric softener sheet).

R: The Bounce, that was last year? Or had you done it before that?

George: Yeah, maybe, but I, sometimes I don't remember, and sometimes they blame me for stuff I don't do. Like, opening stuff, and breaking stuff, and it's either Sandy or Larry (younger sister and brother), but they never confess....They (parents) think it's revenge, but I don't think so. It's mostly curiosity....Well, I sort of, you know, quit it for a while, then, now and then did it some more, then I'm quitting 'cause it's dangerous. Sometimes kids try to beat the devil.

R: What does that mean?

George: It's when you have a match, you light it, and you wait till the last second, and then you take it and ssssssssss (made sound effect of sizzling as he mimed licking two fingers and pinching the end of a match).

* * *

George reported that he quit at 5 years old because, "it just wasn't interesting anymore." He wasn't sure what made him return to lighting fire, "I guess it came back to me. Just instincts, or something." He shared that at about 11 ½ years old, he "started burning Kleenex and stuff....and then we had some magical rock stuff. I stuck a match in there." He also disclosed that although he lit about 10 fires between the ages of 11 ½ and 12, he got caught for three to five of the fires.

* * *

John is the 11-year-old boy who has Tourette's Disorder and ADHD. He is achieving well academically. Although he obviously enjoyed the individual attention and was quite articulate, he was in perpetual motion throughout the interview. John was 8-year-old when he set his first fire.

> John: My mom was gone, and my baby sitter wasn't here. I took a match, and I like, I wanted to use the fire because I thought it was neat, instead of turning on the light in my crawlspace, so I used the fire. And then, and then I lit it all, and then nothing was happening. And I like, waited for, like, like, a time. Not that long, and nothing was happening. And it wasn't getting hot or anything. And it didn't seem hotter. And then when I left, and then it (a piece of wood) caught fire, and then, then I didn't understand why it did.
>
> R: What caught fire?
>
> John: A piece of wood. A piece of dry wood.
>
> R: And then what happened?
>
> John: Then the house got all smoky, and we had to go live at my auntie's for a few days until we found a house. So we found a house to, to rent, until our house was rebuilt.

* * *

Three years later, John was caught lighting a fire in a field with a friend.

> John: I was with my friend that time. And like he, and, I don't know. I just wanted to see what would happen in a field, and it wasn't really curiosity, I just did it 'cause I wasn't thinking. I wasn't thinking right.

John denied setting any more fires since the grass fire but admitted to playing with the lighter at times, in spite of being forbidden to do so.

* * *

Skipper is the 7-year-old girl who experiences severe ADHD and significant learning problems. She is awaiting placement in a segregated special education class for children with learning disabilities. Initially, Skipper was reluctant to share her fire setting experiences. During the interview, her father was working on the computer in the same room. Although he was wearing earphones, Skipper asked him to leave the living room and shut the door before she would discuss her experiences. As she told her fire setting history, Skipper interrupted herself a number of times to tell the researcher about her dog, her family, videos, and to ask questions about the recording equipment. The following comments by Skipper exclude her extraneous commentaries.

> Skipper: The first time I started, when I found matches. I climbed up and they were up in a cupboard, then I climbed up on the cupboard and I found them. And I started to pffffft (sound) recipes. I lit one of the candles. I ripped a piece off the candle. It (the fire) stopped. How I keeped on lighting the fires is, the first time is when I was at my auntie's house. First time I light a fire was when I found matches and then I clack, clack (mimes lighting a match), do it, blow it, put it on and then it burnt the counter. There was a big burn. And then, I just clack, clack, keep on clack clack.

* * *

Don, a 10-year-old boy with academic difficulties, said that he started setting fires at 9-year-old, with peers of the same age.

> Don: Me and some friends, two friends, went out and got paper and matches and lit fires. We just watched it go.

Like George, he related that he wasn't caught until the 10th time he was lighting fires. He lit the fires with his friends.

> Don: One day we went, we found an old, old building, an abandoned apartment, so we went in and looked around and fooled around, and I said "Hey, a couple of matches" and I started a fire, I don't know why. And when we got out, Steve said, "have you got matches?" We set a fire in the garbage can and closed the lid. Actually, my friend, after I put the paper there, I told him that I couldn't get it inside the garbage and I told my friend to cover it and for some reason, he covered it with a piece of carpet.

* * *

Anne is a 12 -year-old girl who has no identified disability but, according to her mother, is below grade level in language arts. At age 11, she was with other children when she was first involved in a purposely-set fire. Two of the other children were her siblings, an 8-year-old sister and a 13-year-old brother.

> Anne: My brother's friend came over, and my mom went out and got a baby sitter. … and she's on the phone, so, and then we were out playing in the garage, me and Peter, my brother and my sister, and Peter's a pyro and he had a lighter with him, and there was gasoline in the garage, and he poured some of that on the floor 'cause he spelled his initials with it and wanted to see what it would look like, and then he took the lighter and lit it.

Anne was with Peter and her little sister again when she lit the next fire in the schoolyard. Three of her friends were also present.

> Anne: Me and Peter, Bert, Darren, Daylene, and Sharon, we were out. We were, Sharon and Peter and me, we all had a lighter on us, and then we found a newspaper that somebody threw away. And then we took branches off a tree and we started the fire.

Anne reported that she, Peter and Sharon each lit the fire simultaneously from different sides.

> Anne: We were going to put it out. We were, when it got low, we were going to step on it.

Instead, they were seen by some adults and ran away, leaving Darren behind because he's in a wheelchair and would have slowed them down.

* * *

Her 8-year-old sister, who is enrolled in a segregated special education program for children with behavioral problems, described the same fire, focusing on the escape rather than the actual fire setting.

> Daylene: Me and my friends and everybody else, well, me and my friends, Sharon, Darren, Bert, Peter, me, my sister, and that's all. And then these people, they come, they came running after us. Me, Peter and Anne, we all split, like, one went that way, one went that way, one went that way. We both came to this road, all three of us came to this road. There was lots of traffic. We just run....They just caught Darren, he's in a wheelchair.

* * *

David is the 9-year-old boy with ADHD and learning problems who attends a segregated class for children with behavior problems. Like Daylene, he was with an older sibling when he witnessed his first fire setting incident at 7-year-old. His brother, Jason, was 11-year-old at the time.

> David: Well, Jason was, like, torturing ants with Sam, and I thought it would be cool to roast a couple of ants. And I got in trouble the first time I did it.
>
> R: What did you do?
>
> David: Roast a couple of beetles, and the ants.
>
> R: What happened once you go caught?
>
> David: I was grounded for a day.

Later on, David expanded on the story. Stating that before he lit his first fire, he felt badly because he didn't want his brother to hurt the bugs. After watching his brother, he decided "it would be cool to kill a couple of ants." According to David, that was the only fire he set until he was 9. He stated that he remembered a couple of the fires he has set over the last year. However, he only related the events of one.

> David: Like the second time I was, like, playing with fire in my room. And I got caught again, and this was for a couple of days (grounding). Then the next time, I was in my room again, and I burnt something. A cabinet of mine. With all my books in it. And I got caught again.

* * *

Chris, age 9, is the third participant in the study who first witnessed the fire setting of an older sibling. In his case, the older sibling is actually his maternal uncle, 12-year-old Ben, who has resided with Chris's family since the age of 5 and whom Chris refers to as his brother. Both boys are in a self-contained special education program for slow learners. Ben has been diagnosed with Fetal Alcohol Effects and ADHD. Chris's language development is somewhat delayed. Thus, the prompts and questions used by the researcher to elicit more information will not be relayed, for the sake of clarity.

> Chris: He (Ben) had toilet paper and he burnt it. In the washroom. Downstairs. He took, I don't know, matches or a lighter, I don't know. And not lots of toilet paper. The fire got bigger. And we lit it on the sink, on the counter. He just blew it out then he left. I left with him. The other ones (fires) were smaller. I set a few, that's all. With matches. (Found them) on top of the fridge. I just lit the match. (I) put it in the toilet. I lit one. It was one with toilet paper.

* * *

Ben was reluctant to discuss the lighting of fires in the washroom. He said that he started lighting fires at age 11 but that, "I don't like it anymore. I stopped a long time ago." In referring to grass fires he had set 4 months prior to the interview, he said, "That was outside," as though it didn't count because it wasn't in the house. He volunteered the following:

> Sometimes I used to melt my little toys and the way they looked when they melted, they looked funny. I did it twice. In the house. That was about several, 6,7 months ago, I think.

* * *

Cole, the 12-year-old boy with a diagnosis of Fetal Alcohol Syndrome, with associated Attention Deficit Hyperactivity Disorder and learning problems, related that he burned down an outhouse by the local park. He also set fires next to a neighbor's garage. Like many of the other participants, he was with a friend when he set the fires. He was rather reluctant to share details about these incidents, perhaps because his father and step-mother were present throughout the interview. As well, Cole's expressive language skills were somewhat limited.

It is apparent that a number of factors are present in the participants' fire setting histories. Many were experimenting to see what fire can do. Some were emulating older siblings or friends. Some of the children set fires alone, some in small groups. Three of the oldest children were reluctant to discuss the details of their fire setting, perhaps because they were old enough to face criminal charges.

### Maintaining Fire Setting

Analysis of the interviews of the participants eventually led to the identification of two factors that appeared to maintain their fire setting behavior. The first factor identified is the motivation underlying fire setting. The second factor identified by the children was consequences of the fire setting. Consequences included the damage caused, whether they were caught or not and finally, the action taken by the parents.

Motivation. Many of the participants referred to fires being "cool" as the main motivation for setting fires. Curiosity was cited as the next most popular motivator, followed by challenge, opportunity and impulsivity.

When asked about his first exposure to fire, Don shared memories of campfires experienced when he was camping in his early elementary years. This is what he remembers about those fires: "Light, flaming, attractive, cool." He reported that those characteristics of fire attracted him and his two friends to set fires. Other participants also referred to the interest fire holds for children.

For instance, when asked her opinion about why children light fires, Anne replied, "cause they like fires." She stated that her and her friends' motivation for lighting the fire in the school yard was because, "I love fire, and so did she and so does Peter (friends who lit fire with her)."

* * *

David: I thought that it would be cool. The fire would be cool.... (Kids light fires) cause they think it's going to be, like, cool.

* * *

John: Fire is neat.

* * *

Ben: Some kids set fires maybe 'cause the way it smell.

As noted earlier, Ben also shared that he used to melt his plastic toys because he thought they looked funny when they melted.

* * *

Curiosity was offered by some of the children as a motivation for setting fires. They described experiments with fire that they conducted at home.

> George: I think it's curiosity that cause it.... See which things burned more faster than others.... and they (parents) think it's revenge, but I don't think so, it's mostly curiosity.... Well, I say curiosity killed the people, or the cat, or when you want to try something, you try it. Or mostly curiosity, or what stuff will burn, what stuff will melt, or something.

* * *

> John: It was probably curiosity (that motivated him to set fires).... (Kids probably start fires because) they want to find out what they do. What they're like,... Like, they want to find out and thought that it would probably be neat. And they want to see what they can do and stuff, and play with them.

* * *

Other reasons were brought up by the participants, as follows:

> Ben: I did it cause it was kind of sneaky kind of thing. No one knew. It was kind of exciting.

* * *

> David: (Kids) think it's, they can be, like, improved or something.
>
> R: What do you mean?
>
> David: Like improve, being better.
>
> R: I'm not sure I understand how that works. Could you explain it to me?
>
> David: Like, they think they're going to be better than anyone else 'cause they did a fire.

* * *

Cole: Well, we were at the park. We were just playing around, and then, and we just decided to burn down the outhouse.

* * *

Three of the participants, Skipper, Daylene, and Chris did not have any insight into their or other children's motivation. The other seven participants cited factors such as curiosity, scientific exploration, and getting away with doing a forbidden activity that reinforced the fire setting behavior, in spite of the risk of getting caught.

Consequences of Fires. Physical consequences of the fires ranged from minuscule (i.e., burned fingers, slight marring of furnishings, burned patch of grass) to major house or apartment fires. Consequences for getting caught also varied.

David reported that after imitating his brother's behavior by setting an ant on fire, at age 7, he was caught and grounded (he wasn't allowed to go outside) for a day. As well, he felt sad about having killed the ant. He reported that he did not light any more fires for 2 years after that. Then he was caught playing with matches in his room and was grounded for 2 days. The last time he was caught, he was grounded for "a whole week" and the fire inspector came to speak to him.

* * *

For some children, the natural consequences of the fire setting were worse than any punishment they may have been given. For instance, when John burned down his house, he lost his home and his parents' trust. When asked about the consequences, he only related the fact that he had lost his parents' trust, suggesting that that consequence was more memorable.

Three years later, after a break in the fire setting, John started playing with lighters. Subsequently, he was caught lighting a grass fire in a field with a friend.

> John: Some guy on our block saw it, and he chased us, and he caught us, and he took us there, to our parents.
>
> R: What did they say?
>
> John: The other parents didn't really care. And my parents were mad.
>
> R: What was the consequence?
>
> John: That I wasn't allowed to, like, play with him anymore, and I lost their (parents') trust even more.

* * *

George believes he "got away with" at least 50% of the fires he set. Each time he was caught, he reported that the only consequence was to be told to stop. However, the last time he was caught setting a fire, his mother contacted the fire department for some assistance.

> George: She just told me, "Stop that." Warning, warning, and then she got out the big guns. That constable guy (fire inspector). The 'big guns' is what I called him.
>
> R: Oh, the fire inspector, yes.
>
> George: The 'big guns' is what I called him.

* * *

Don wasn't caught until he lit a fire that went out of control.

> Don: I wasn't caught. We weren't caught and we decided that we could get away with it at the time. So we kept on doing it, and doing it, and doing it.

He participated in 10 to 15 fire settings with his friends. When the last fire they lit together went out of control, he went to a friend's house and told him to call the fire department.

> Don: Then I went home 'cause I smelled of fire so I went to shower and I felt real guilty. So I told my mom. My friend, he lied to the cops. He told them he didn't do it. I'm the only one who told the truth.

* * *

Don's consequence was the end of the friendship. Two months later, the landlord caught him lighting a fire beside the apartment house. This time he was alone. A visit from the fire inspector followed. According to his mother, Don cried during the entire visit.

> Don: He told me if I did it again, it would be real bad next time.

* * *

Cole's consequence for setting fires was a talk with dad. As well, when he was caught by some men for setting a fire by a neighbor's garage, "they made me say 'sorry' to the guy who owns the house and stuff."

* * *

Daylene and Anne were grounded after the schoolyard fire. As well, Anne's mother walked to and from school with her. Although Daylene told the researcher that Anne was involved in a subsequent fire inside the school and

Anne reported that Daylene set that fire, they both denied having been involved at the time and were not disciplined because their mother believed them.

* * *

Skipper had difficulty staying on topic. She also seemed to have difficulty telling the difference between her own experiences and the information she was given on fire prevention.

> R: Could you tell me about the first time you played with matches.
>
> Skipper: I remember, I burned myself right here (showed her toe). And then it started to go on and then I stopped, dropped, roll. And it worked. Because I was burn by the match and I dropped it. I dropped it. And then, then it, then on my toe. Then it dropped a fire. Then, watch! (Demonstrating actions) Stop, drop, roll. (Repeating demonstration, then tapping herself). There, there. It goes out.

* * *

When she was brought back to the topic of the first time she lit fires, she related that she was living with her aunt at the time she set fire to the recipe cards on fire and left a burn mark on the kitchen counter.

> Skipper: She was mad. She said, "Go to your room!" My punishment was I couldn't go out to anywhere.

* * *

While she lived with her aunt, there were no more fires. Skipper stayed away from matches and lighter until she returned to live with her mother.

> Skipper: Then we started to have fires and stuff.

* * *

In a roundabout way, Skipper explained that she watched a fire video with her mother and that it frightened her so much she ran to her room. Yet, after watching the video, she took matches from her mother's work place and started lighting fires again.

* * *

Ben and Chris did not report any consequences for setting fires except for a visit from the fire inspector.

* * *

In summary, according to the children, the consequences of fire setting ranged from natural consequences such as losing a home, to losing a parent's trust, to consequences that they could no longer remember. Some participants were grounded or cut off from friend(s), others were lectured, and all had a visit with the fire inspector. Their comments suggested that the fire prevention visit from the fire inspector had the most impact and being separated from their friends had the least impact.

## Reasons for Stopping Fire Setting

The children who said they had stopped lighting fires were asked what made them stop. Their reasons for stopping were consistent with the motivation and the consequences they shared with the researcher.

"Over the Stage'. Only four participants were able to describe the end process of their fire setting.

Ben: I don't like it anymore. I stopped a long time ago. It wasn't interesting anymore… It didn't come in the interest. I didn't like it… I could be doing other things.

* * *

Don: I stopped because of the trouble I've been in. I don't like the attention… I'm over that stage… He (fire inspector) told me if I did it, it would be real bad next time.

* * *

George: Now I'm not 'cause I seen all those, the video where that one kid blew his thumb off with the blow torch… Plus, thanks to grade 6 science class, we got to see which stuff burned faster too. And she got different materials, so now I quit after that, kind of. And then, then it was the fire tape, safety stuff (fire inspector's presentation)… Those videos were kind of freaky.

* * *

John: I learned my lesson after that… 'cause I got caught, and then I never played with fire again.

* * *

In summary, two children said that they stopped setting fires because they lost interest. One child was frightened by the fire prevention videos and another said that getting caught was enough to make him stop. The other six children did not say why they stopped setting fires.

Advice to Firesetters. The participants shared their advice on dealing with children who set fires. Some of them were quite clear in what the response should be.

Chris: I'd tell them to quit!

* * *

Ben, who was initially reluctant to talk about his own experience with fire setting, was quite willing to discuss the advice he'd have for any child caught setting fires.

Ben: Maybe you can't stop them. Maybe you just got to wait till they get bored of it cause you never know if they're going to be doing it. If you're gone or something and the parents aren't looking, they could just be doing something like that. They could just stop when they want to stop. Maybe some of them just may get a talking to.

* * *

Don: Don't commit arson, you get caught and in trouble. Find another hobby. Keep your hands in your pockets.

* * *

Daylene: I'd say, "You'd better not do it."
R: Would you say anything else?
Daylene: No, I wouldn't even talk to them. I'd let them get in trouble and not me.

* * *

George: Well, the first time, if it, if he was my kid, the first time I caught him, I would have just got out the big guns' (fire inspector). 'Cause he would have quit cause he seen it, and I was kind of laughing 'cause I thought this was drama skills, and stuff, like, acting but then when he said it wasn't, I kind of believed him, and then 'cause it was kind of gross, I believed him. They (his kids) probably wouldn't do it 'cause it's probably, they won't really care about fire 'cause they probably camp a lot.

* * *

Skipper: Bad girl, go to your room. Actually, to tell kids to stop lighting fires is telling them "bad girl, go to your room."

R: And that makes them stop?

Skipper: Yup (wagging a finger and talking with a high pitched voice), "And you think about what you've done." (talking with a squeaky voice), "Can I come out?" (return to the high pitched voice), "No, you think about what you've done."

* * *

John: I would tell him not to. And I would tell his parents. 'Cause then he would never stop.

R: You don't think he'd stop on his own?

John: Nope. Even though, even though I didn't want my parents to find out. But it would probably be best, then, 'cause then they would just find out later 'cause I'd probably do it later. They found out before something else really bad had happened. Tell them that it's wrong. And maybe showing them what they (fires) can do. Like, showing them how to, like, people that got burned from the fire and a video that shows people that were in a fire.

* * *

David: Stop, don't do it.

* * *

To summarize, all of the participants could voice the undesirability of fire setting and most were willing to talk about their involvement in setting fires. Four of the children had seen an older child or sibling setting a fire before engaging in similar behavior. Six of the children set fires with friends.

## Picture Stories: Results

Each child was asked to respond to seven pictures from the Roberts Apperception Test for Children (RATC) (McArthur & Roberts, 1982) and three pictures representing scenes related to fire (Appendix D). As noted earlier, the RATC pictures represent common interpersonal situations such as parent-child interaction, family interaction, peer interaction, and school situations. The children were asked to make up a story about the picture, what led up to the picture, what happened in the future, and to say what the people were talking about and feeling.

Little significant data emerged from the stories elicited from the pictures. The children tended to remain descriptive in most of their stories. Although only the last three pictures were related to fire, four of the participants referred to fire when shown the first story, which depicts children talking with one another. However when told that the stories did not have to be about fire, only one child, John, persisted with the topic. In fact, John persevered with the topic of fire throughout the 10 stories.

In response to the eighth picture, depicting a child playing with a lighter, all seven male participants referred to the object correctly and all three female participants referred to it as a candle. Five of the children said the child would get burned and two said the house would catch on fire. One child, George, said that the parents would, "call in the big guns," a response similar to what happened when he was caught playing with lighters.

In the stories, the children presented parents as generally giving reasonable consequences for misbehavior. For example, Ben talked about a child who is grounded and another one who gets an explanation about why the behavior (playing with matches) is dangerous. In Chris, Anne, and George's stories, the children get sent to their room. However, George also gets a lecture. Grounding was most often mentioned as a consequence. Other consequences evident in the stories included the loss of privileges, isolation from friend ('bad influence'), and loss of parents' trust.

The fourth picture (showing a man sitting and looking at what looks like a piece of paper and a boy standing by him) elicited responses of a father ignoring the boy from five of the participants, including one who said the child wanted to tell his dad about having been hurt. As well, one respondent, Don, who had broken off contact with his father, told the following story:

> The boy has a test and his dad is looking at him and that's 'cause he got a low mark and I guess his dad is putting him down and that. He's going to fail just about every test because he's afraid of his dad, that he'll put him down again and again. So he'll hear that. So he'll just fail and fail or get low marks.

* * *

John, who persevered with the fire theme throughout his stories and felt badly about having lost his parents' trust, related the following story in response to the fourth picture:

> The boy got in trouble with fire and the police wrote, wrote something. What he did. And his father's looking at it. And the boy is sad, and he's, doesn't know what to say. And his father's probably not so happy with him. And then he'll probably lose his father's trust there. Yea! And then he'll probably never do it again.

* * *

The seventh picture (depicting a child holding a pencil and looking at an open book, with other books by his/her side) elicited the least descriptive and most emotional response. It was evident that the participants related to the picture by their negative responses. The child in the story was depicted as having a "hard time doing his work;" "mad that they had more work;" "frustrated;" " late for his homework…going to get a detention;" "trouble with his homework, and he gets in trouble because he fails the test." George strongly identified with the picture, as evidenced by his story:

> That's me doing my homework for the first time in a long time. And then I finished it off, and the teacher gave me an 'F' 'cause it was all-wrong. But I got to mark on it anyway, so it was all right…. But then this genie came out and made it into an 'A' 'cause see, an 'F', (if) you take the line on top, and then put it down, that's a flat top for an 'A', and then it's down, and then the 'F' is like that, and you come up with an 'A'.

* * *

John's preoccupation with the fire theme is also evident in this story:

> This guy's thinking of, like what he did. Probably lit a fire. He never told and he's thinking he's going to get caught sooner or later. And then, so he's thinking of it, and he can't concentrate on his homework 'cause he's, he keeps thinking if he's going to get caught or something.

In summary, the stories did not offer much useful information other than an indication that the participants perceived school as negative. As well, parents were portrayed as reasonable in the consequences they imposed for misbehavior. Both these projections were congruent with the interview data.

## Results of Child Behavior Checklist-Parent Report Form

Daylene's mother did not return her Child Behavior Checklist-Parent Report Form (Achenbach, 1991). Attempts to contact the family were unsuccessful because they moved without leaving a forwarding address or telephone number with the researcher or the fire inspector who referred them. However, her mother reported in the interview that she perceived Daylene as much easier to handle than her sister, Anne. Thus it would be likely that her ratings would be less severe than her sister's.

The results are presented in Table 5. Scores of 70 and above are clinically significant, indicating a high level of maladaptive behavior, as rated by the parent. The score of 70 and above are presented in bold type.

Table 5

Child Behavior Checklist – Summary

| Child | W | SC | A/D | SP | TP | AP | DB | AB | T | Int. | Ext. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ben | 50 | 53 | 56 | 50 | 50 | 50 | 65 | 66 | 58 | 51 | 67 |
| Chris | 54 | 64 | 64 | 56 | 50 | 50 | **70** | 65 | 63 | 64 | 68 |
| Cole | 58 | 59 | 63 | **70** | 67 | **75** | **72** | 59 | 68 | 64 | 67 |
| Don | 58 | 64 | 58 | **70** | 57 | 51 | 54 | 58 | 58 | 60 | 58 |
| Daylene | na | na | na | na | na | na | na | na | na | na | na |
| Anne | **77** | 67 | **72** | 64 | **82** | 67 | **78** | **72** | **77** | **76** | **75** |
| George | 50 | 53 | 63 | 63 | 57 | **70** | 63 | 62 | 66 | 58 | 63 |
| Skipper | 66 | 58 | 59 | 66 | **76** | **77** | **76** | **81** | **75** | 62 | **78** |
| John | 64 | 64 | 62 | 50 | **70** | 60 | 54 | 55 | 62 | 66 | 54 |
| David | 64 | 67 | **70** | 68 | **70** | 69 | **76** | **70** | **73** | **71** | **73** |

Note. W= Withdrawn; SC= Somatic Complaints; A/D= Anxious/Depressed; SP= Social Problems; TP= Thought problems; AP= Attention Problems; DB= Delinquent Behavior; AB= Aggressive Behavior; T= Total Score; Int.= Internalizing Score; Ext.= Externalizing Score.

In the results shown in Table 5, it is evident that although a number of parents reported that their child were diagnosed with ADHD (i.e. Ben, Cole, Don, George, Skipper, John, and David), they did not perceive it as significant in the home, at the time they were filling out the protocols. The category reported most often as maladaptive was Delinquent Behavior, rated as clinically significant in five out of nine children. It is interesting to note that except for David, who was rated in the clinically significant range in 7 out of 11 categories, the two girls were presented as having the highest level of maladjustment by their parents. This is consistent with the adult literature showing that females involved in arson have more pathology than males arrested for the same crime (Holmes & Holmes, 1996; Stewart, 1993). A review of answers to specific questions related to bowel and bladder control and cruelty to animals indicated that these were not problematic in the children. These findings are consistent with spontaneous comments made by parents and my observations of interaction between the children and the family pets during the interviews.

## Summary

The purpose of the present study was to address the question: What is the phenomenon that results in a child progressing from being curious about fire to setting fires? In keeping with the symbolic interaction theoretical framework of Grounded Theory, attempts were made to understand the meaning from the perspective of the participants and to look at their behavior in context (Chenitz, 1986).

It is evident from the data that there is not one single factor but numerous ones, which result in a child progressing from playing with matches to setting fires. In terms of conditions, the children related different motivations for starting to light fires and for stopping, but curiosity was most often cited both in the intrinsic attraction of fire and in its effect on different substances. The contexts were also varied but common themes were the presence of learning difficulties including ADHD, family disruptions, tense relationships with school, victimization by peers, and parental apprehension about their children. All but one of the participants had access to matches or lighters in their homes. Four of the children witnessed older children or siblings setting fires prior to setting their own fires.

Glasser (1978) advised that researchers using Grounded Theory look for a core category that accounts for most of the variation in a pattern of factors and behavior. As noted in the methodology section, Basic Social Psychological Process (BSPP) refers to the process individuals engage in as an attempt to resolve problematic areas in their lives. The BSPP are not necessarily conscious or overtly visible which is why they have to be discovered (Glasser & Strauss, 1967). In the following chapter, the information obtained from this study is compared with relevant literature, the data are integrated into a BSPP, and a juvenile fire setting model is presented.

# CHAPTER FIVE

## DISCUSSION OF FINDINGS

This study was conducted to explore the factors related to juvenile fire setting. The research question was presented in a broad way to enable flexibility in the breath and depth of inquiry. In the previous chapter, excerpts from the parents' and children's interviews were presented along with the responses to the stimulus pictures, and the results of the Child Behavior Checklist, Parent Report Form (Achenbach, 1991). This chapter begins with a summary of the findings. This is followed by the relationship of the findings to relevant fire setting literature, and by an examination of the findings in the context of relevant child development theories, after which the emergent theory is presented in the context of the research. The final section includes implications of the theory for educators, limitations of the study, and suggestions for future research.

### Summary of the Findings

First, non-fire related themes that emerged were family disruptions, characterized by death of a parent, marital abuse, and family breakdown including foster care placement; learning difficulties, which included a preponderance of children diagnosed with ADHD; tense parental relationships with schools; child victimization by peers, particularly at school; and parental apprehension about their children related to the children's impulsive behavior.

Second, the parents' description of their children's fire setting histories were congruent with the children's. Many of the children were experimenting with the properties of fire. Some were emulating older siblings or friends. Some of the children set fires alone, some in small groups. Three of the oldest children were reluctant to discuss the details of their fire setting, perhaps because they were old enough to face criminal charges. The main motivation identified for setting fires was that fire is "cool." Curiosity was cited as the next most popular motivator, followed by challenge, and opportunity combined with impulsivity. The consequences of fire setting included losing a home, being grounded, being cut off from fire setting friends, and lectures from parents. As well, the fire inspector visited all of the participants. Although the children could voice the undesirability of setting fires, they were divided on the effectiveness of intervention. Some of the children proposed that firesetters would stop when they choose to. However, most participants agreed that 'getting caught' was a starting point in changing their behavior.

Third, although little significant data emerged from the stories elicited from the Roberts Apperception Test for Children ( RATC) (McArthur & Roberts, 1982) and the fire related pictures, the stories indicated that the children perceived school as negative and parents were portrayed as reasonable in the consequences they imposed for misbehavior. The results of the Child Behavior Checklist-Parent Report Form (CBCL) (Achenbach, 1991) indicated that although a number of parents reported that their child was diagnosed with ADHD, the parents did not perceive it as significant in the home. As well, the ratings to questions related to cruelty to animals and bowel and bladder control indicated that these were not problematic in the population of the present study.

### Relationship of Findings to Relevant Fire Literature

At this point, it would be useful to revisit the literature on fire setting to see how the findings relate to the existing literature. First, we will revisit the literature on fire interest in normal development, then children who set fires, followed by adults who set fires.

Fire Interest in Normal Development. The beginning of the fire setting process reported by the participants is consistent with the literature. According to Grolnick et al. (1990), curiosity, the most often cited motivation in their study, accounts for over 60% of fire setting by children. As well, playing with fire is common enough in young children to be regarded as part of natural curiosity (Block et al. 1976; Grolnick et al., 1990; Kafry, 1980; Showers & Pickrell, 1987). Many of the children in this study named curiosity as the prime motivator. Six children were reported to have followed the pattern of playing with fire before the age of 6, followed by a moratorium of 2 to 6 years, then resumption of fire setting. Also consistent with the literature on fire interest in normal development (Grolnick et al.), there was a higher incidence of boys than girls in the present sample.

Children Who Set Fires. Yarnell's (1940) findings of maturational delay and chaotic family dynamics are consistent with the sample of the present study. Even though the participants were recruited from the community rather than from a clinical population, all of them experienced maturational delays in at least one area of development. Seven of the participants had been diagnosed with ADHD, which is also consistent with Yarnell's conclusion that juvenile fire setting is characteristic of impulse dyscontrol. Even though ADHD did not exist as a classification of childhood disorder at that time, she perceived the impulsivity as reflecting extreme deprivation, rather than considering it as part of a constitutional disorder (Barkley, 1997). The present population also shared chaotic family dynamics with Yarnell's population, with histories of parental drug and/or alcohol abuse (N=6); parental separation or divorce (N=6); surrogate or foster care placement (N=6); death of parents, including suicide (N=4); and parental incarceration (N=3). The only participant who was not reported to have a chaotic family background was a boy who had Tourette's Syndrome complicated by ADHD.

All of the participants had achieved control of their bowels and urine, thus providing evidence against the psychoanalytic perspective (Erlenmeyer, 1932; Freud, 1930). This finding is consistent with other studies indicating that there is no link between fire setting and lack of bladder and bowel control (Fine & Louie, 1979; Showers & Pickrell, 1987). However, the information of victimization, poor impulse control, and learning difficulties expressed by the parents are consistent with some of the findings of one psychoanalytic study (Sakheim et al. 1991), which is based on the comparison between children with minor fire setting histories with children with severe fire setting histories. As well, although the participants did not share intense feelings of anger and resentment at maternal neglect, rejection, deprivation, or abandonment nor of feelings of impotent rage at insults or humiliations inflicted by peers or adults, these feelings would certainly be understandable in the context of their histories. However, except in one case in which the child was emulating an older sibling by burning ants, none of the participants in this study were reported to show cruelty to children or animals nor of having been diagnosed with Aggressive Conduct Disorder, unlike the participants in the study by Sakheim et al. (1991). A possible factor is the difference in populations studied. The present study focused on a community-based sample while the study by Sakheim et al. (1991) focused on a population from residential treatment centres.

The findings of this study were consistent with the behaviorist paradigm which highlighted the importance of positive reinforcement in maintaining fire setting behavior (Wooden, 1985). For instance, descriptions such as "attractive," "cool," "fire is neat," "exciting" and,"I love fire," were used by the children. Many of the parents also talked about the family burning candles together and lighting backyard fires, with the children burning twigs or small pieces of wood with the parents watching on, thus learning that playing with fire is acceptable (Fineman, 1980). As well, four of the children had watched an older sibling or friend set fires, prior to setting their own, which would suggest that fire setting may have been modeling behavior (Bandura, 1991).

The dynamic-behavioral perspective, which emphasizes combined constitutional, environmental, and experiential factors (Gaynor & Hatcher, 1987; Kolko & Kazdin, 1986; Vandersall & Wiener, 1970) is probably the most consistent with the findings of the present study. Both perspectives reflect the complexity of fire setting behavior.

Adults Who Set Fires. The findings of this study are only consistent with the sub-classification of arson identified by Geller (1992b) as "Arson Associated with Mental Disorders" and to three of the eight types of firesetters identified by Fineman (1995), namely: curiosity, accidental, and cognitively impaired. The lack of fit across all the classifications identified by Geller and by Fineman does not negate the validity of the findings of the present study. In view of the difference in adults' developmental levels and complexities, one would expect to find an even larger range of factors in adult firesetters (Cantor & Fritzon, 1998; Fineman, 1995; Geller, 1992b) than in juvenile firesetters (Gaynor & Hatcher, 1987; Kolko & Kazdin, 1986).

The prevalence of victimization by peers in the present study is consistent with the adult literature indicating that problems in social competence may be an important factor in adult firesetters (Geller, 1987; Harris & Rice, 1984; Rice & Harris, 1991). More specifically linked to the present study is the report of being the brunt of teasing due to disability, evident in adult psychiatric patients who resorted to setting fires (Geller, 1987).

## Relationship of Findings to Related Child Development Literature

The following section will integrate the findings with the related child development literature. It will include psychosocial development, moral development, Maslow's theory, and Bronfrenbrenner's ecological theory.

**Psychosocial Development.** As noted earlier, Glasser (1978) advised that researchers using Grounded Theory look for a core category that accounts for most of the variation in a pattern of factors and behavior. While reviewing the transcripts, I kept asking myself what it would be like to walk in the shoes of the child participants of the study. This brought to mind Erik Erikson's perception of the school-age child, namely, the concept of Industry versus Inferiority, in his theory of psychosocial development (Erikson, 1959).

Briefly, Erikson (1959) proposed that psychosocial development results from the interaction between internal desires and external social demands. He suggested that development is an evolutional and universally experienced process of biological, psychological, and social stages with tension between two opposing motivational forces that are outlined below. Erikson used the word 'versus' (vs.) to indicate the tension between the two forces. He identified eight stages through which individuals pass throughout their life. Each stage is dependent on the resolution of the preceding stage. The stages are as follows:

1. Infancy- Sense of basic trust vs. basic mistrust
2. Toddler- Sense of autonomy vs. shame/doubt
3. Preschool- Sense of initiative vs. guilt
4. School-age- Sense of industry vs. inferiority
5. Adolescence- Sense of identity vs. role confusion
6. Young adulthood- Sense of intimacy vs. isolation
7. Adulthood- Sense of generativity vs. stagnation
8. Old age- Sense of integrity vs. despair

It should be noted that Erikson (1959) prefaced each phase with "a sense of" to indicate the importance of the feeling of having achieved or failed to accomplish the theme relevant to the stage of development. The stage most relevant to this study is the fourth stage, which is of particular significance for school-aged children. Erikson saw the school-aged child as facing the task of acquiring a sense of industry while fending off a sense of inferiority. He suggested that the process of industry entails the mastery of skills through which competence is developed. In North American society, the school plays a particularly important role during this phase as the child is taught academic skills and he/she encounters a microcosm of society.

> School seems to be a culture all by itself, with its own goals and limits, its achievements and disappointment. The child's danger, at this stage, lies in a sense of inadequacy and inferiority. If he [sic] despairs of his tools and skills or of his [sic] status among his [sic] tool partners, he [sic] may be discouraged from identification with them and with a section of the tool world. (Erikson, 1959, p. 260).

What happens to the child who, like a number of participants in this study, fails to master the most basic of the "tools," reading? What about the child who is frequently in trouble because of poor impulse control, has difficulty with paying attention and hyperactivity, has not mastered the appropriate behavior "tool?" What about the child who is rejected by peers, thus failing in the social aspect of school life or, to use Erikson's (1959) metaphor, in acquiring the tool of socialization. As was evident in the transcripts, for many of the participants, school presented many negative experiences. Even the parents felt alienated from the schools.

Half of the participants were in segregated special education programs and one student was on a waiting list for a special education placement. Another student fell between the cracks as he struggled with the academic demands but did not meet the criteria for extra assistance. Two other participants were experiencing academic problems in one or more core subjects but did not receive any extra academic support. The only student who was performing at grade level was diagnosed with Tourette's Syndrome and ADHD. Six other participants also had ADHD and two were diagnosed with Fetal Alcohol Syndrome. The present findings are consistent with the research on the adult populations of arsonists, indicating, among other factors, the presence of a poorer educational history, when compared to other groups of criminals (Raeswaenen et al. 1985; Vreeland and Waller's , 1980).

I now return to Erikson's model (1959) and to the question of what happens to the school-age child who is rejected by peers. Successfully moving in the world of peers is a major developmental task of the elementary school-aged child (Parker & Gottman, 1989). A child's emotional competence has a real impact on how the child copes with peers and school relationships (Denham, 1998). Social competence can be disrupted by intra-personal factors such as biologically induced vulnerabilities, impairment in neurophysiological functioning, and temperament. It can also be disrupted by interpersonal factors such as maternal depression, family discord, separation, as well as unpredictable or harsh treatment. In many cases there are mixed contributors characterized by a myriad of intrapersonal factors interacting with interpersonal factors (Denham, 1998; Saarni, 1999).

In the present study, parents expressed a great deal of concern about the children being picked on at school. In fact, a sense of helplessness in stopping the persecution was evident in three out of the eight families. One parent transferred her son to another school, three of the other families had also considered changing schools, two of the children tried to avoid school through illness, and one parent took on the bullying children herself by pulling their hair and threatening them, thus getting "…a reputation in the neighborhood that I was a mean mom…," which resulted in stopping the bullying.

Rejection by peers is particularly significant, as peer relationships increase in importance and in complexity throughout the school years. Peer status is influenced by communications skills, including the comprehension of verbal and non-verbal signals and the ability to effectively resolve conflicts (Earn & Sobol, 1990). Social cognition is a complex process that involves self-awareness, awareness of others, perceptions, interests, intentions, motives, attitudes, and beliefs (Flavell, 1979). Particularly troublesome are impulsive behaviors (Denham, 1998). Rejected children are often considered bossy, rigid, and self-centered. They seem to have a tendency towards learned helplessness, possibly because they misread social cues, misunderstand attributional factors and do not understand why they are not accepted by their peers (Toner & Munro, 1996). This is consistent with the social problems experienced by children with ADHD (Barkley, 1997, 1998; Beugin, 1990; Robin, 1998). John's mother referred to the problem of John accidentally hitting other children because of the involuntary tics associated with Tourette's syndrome. He could not understand how the recipients of the kicks could be upset since he did not kick them on purpose. In discussing the school problems encountered by children with ADHD, Beugin (1990) stated:

> Because they tend to be so domineering, they often end up playing with younger children or with older children who may be more tolerant, or they play alone. Often their peers will tease them or pick on them because they delight in provoking those with explosive tempers, and because these children are generally unpopular and have low self-esteem. (p. 24)

The parents of other children participating in the present study referred to similar problems. For instance, Ben, David, Colin, Don, George, and Skipper tended to seek out friends who were younger than they are. Conversely, Daylene and Chris tagged along with their older siblings and their friends rather than making friends their own age. None of the children interviewed had any insight into possible reasons for their difficulties in making and maintaining friends their own age and in being victimized by their peers.

The chaos and disruptions in parenting experienced by most of the participants may well be another factor in the social rejection reported by a number of parents. The extent and nature of the reported disruptions may have had an even more pervasive impact (Stroufe & Jacobvitz, 1989). For instance, Daylene and Anne lost both their parents at different times due to the parents' incarceration. Their mother, Eve was jailed twice. Their father's incarceration occurred after a well-publicized trial, involving a sexual assault. Eve was also hospitalized on different occasions as the result of injuries received at the hands of her husband. Skipper 's parents separated when she was a preschooler. Shortly after, she was sent to live in another part of the province with a relative that she'd had little previous contact with. While in her aunt's care, she was sexually abused by the aunt's boyfriend. Cole and his siblings have been going back and forth, scattered among the father and extended family members since he was 2 years old, when the parents separated. His mother, a woman severely addicted to drugs, committed suicide when he was 5 years old.

David's mother left his father when he was an infant, after a vicious attack by the father that resulted in her hospitalization and subsequent move to a new province with David and his older brother. He had no further contact with his father and recently found out that he had died. When Chris was 2 years old, and Ben, his maternal uncle, was 5 years old, they traded residences. Chris went to live with his maternal grandmother and Ben permanently moved in with Anita, his sister. When the boys were 7 and 10 years old, respectively, the elder of the two women died and Chris returned to live with Anita. Don's mother was abusing drugs in his early developmental years. Although George and John were in intact families, John's father worked out of town and George's mother suffered from recurring periods of depression, rendering her less available emotionally.

As one reviews these children's histories, it becomes evident that they all shared varying degree of separation from significant others. Those separations ranged from periodic absences to final separation. The caretakers who replaced the absent parent(s) varied from the other parent, to extended family, to complete strangers.

The sequel of separation from significant others is well documented in the literature ((Bowlby, 1969; Erikson, 1959; Jewett, 1982; Maslow, 1954). Attachment is one of the most important building blocks for human development. Insecure or ambivalent attachment can interfere with self-regulation, resulting in behaviors that mimic Attention Deficit Hyperactivity Disorder (ADHD) (Waters, Posada, Crowell, & Lay, 1993). Based on her family therapy experience, Jewett (1982) concluded:

> Because children who suffer a loss or separation are usually unable to remedy the situation, they understandably have strong feelings of helplessness-they begin to think of themselves as weak, feeble, and powerless. These feelings are compounded if, through shame or guilt, the child begins to feel helpless about her ability to make and maintain close relationships. (p. 117)

In summary, the children interviewed for the present study faced a number of challenges in achieving a sense of industry (Erikson, 1959) through the mastery of academics and socialization. All of the children experienced learning problems, ranging from a reading disability to ADHD. For six of the participants, the problems were severe enough to require special education placement. All but one of the children were victimized at school. There were indications that learning difficulties (Barkley, 1998; Beugin, 1990; Robin, 1998) and family disruptions (Bowlby, 1969; Jewett, 1982; Maslow, 1954) may have been factors in the social skills problems.

Moral Development Theories. Making decisions about right or wrong behavior is an important aspect of social cognition. Children usually learn to tell right from wrong as part of their developmental processes. Piaget (1932) applied his notion of development stages to the development of moral judgment. According to Piaget, development takes place as a result of interaction between the child and the environment. More complex thinking and reasoning ability emerges as children become capable of logical thought and of seeing the world from the perspective of others. Kohlberg (1969) developed Piaget's theory further, proposing six stages of moral development, classified into three levels. The levels that most apply to the present study are the following:

**Level I - Pre-conventional**

Child responds to societal rules according to consequences or from the physical power of the person imposing the rules.

**Stage 1** - Child behaves according to societal norms because he/she is told to by an authority figure such as a parent or a teacher or to avoid punishment.

**Stage 2** - Right behavior means acting in one's own interest to obtain rewards.

**Level II - Conventional**

One is concerned with maintaining and justifying the expectations of family and peers.

**Stage 3** - Doing what will gain the approval of others.

The participants' reflections on getting caught and on ending their fire setting activities suggests moral development at the first stage of the preconventional level (Kohlberg, 1969). Namely, 'one behaves to avoid punishment.' This stage is consistent with an egocentric point of view that doesn't consider the perspective or interests of others. Don's words explain the thinking associated with the preconventional stage well: "We weren't caught and we decided that we could get away with it at the time. So we kept on doing it, and doing it, and doing it." Many of the participants felt intimidated by their interview with the fire inspector as evidenced by Don crying throughout the interview, John's reference to calling in "the big gun," and in both John and David stating that they resolved to stop setting fires after being shown the videos. These responses are also congruent with the preconventional level (Kohlberg), in which the child is responsive to the point of view of a person who is seen as having the physical power to impose their demands. Even Anne, who did not abide by her mother's rules and was not easily intimidated, admitted her part in the fire setting to the fire inspector and reportedly stopped further fire setting activity, although she continued smoking in secrecy, which implies access to matches or a lighter.

Maslow's Theory. Maslow's hierarchy of needs is relevant to the discussion. He stated that human beings are motivated by the subjective perception of their needs. Maslow (1954) constructed a model of needs that included five categories, arranged in a progressive order. He proposed that until the basic needs are minimally met, subsequent needs can't be fulfilled. He placed physiological needs (hunger, thirst, and sleep) at the bottom of the pyramid. Next on the hierarchy are security needs (provided by a safe, stable environment), followed by the need for love and belongingness. According to Maslow, once all these needs are met, the self-esteem needs are activated and can serve as motivators. Included in the self-esteem needs are self-confidence and the desire for recognition and appreciation by others. Once all those needs are met, the individual has the competence necessary to seek out self-actualization, to become all that he/she is able to be.

Thus, the participants who experienced loss of parents or severe disruptions may well be struggling with safety needs. This is evident in Eve's concern that her daughters, who have suffered a number of separations from their parents through incarceration and child welfare involvement, are afraid to express anger towards her or to share some of the struggles they are experiencing with the family therapist out of fear of being separated from her again. As noted earlier, for many of the participants, school was not perceived as a safe environment. Not only were they victims of bullying, but also many experienced learning problems. Being picked on at school interfered with feeling that they belonged. Failing in the mastery of the school 'tools' was not conducive to feeling competent and valued. Thus, they were not in a position to have their higher needs met. According to Maslow's (1954) theory, their preoccupation with their safety needs would be foremost in their lives. This is consistent with some of the children pretending to be ill in order to avoid school.

Bronfenbrenner's Ecological Theory. Results from the present study indicate that a myriad of converging factors and circumstances contribute to juvenile fire setting behavior. As one examines the complexity of the individual characteristics and of the life events each participant brought to the fire setting experiences, it becomes evident that although they share some attributes and some stressors, each participant, including the siblings involved in the study, is a unique child. As noted earlier, in the literature review, these observations are consistent with the tenets of Bronfenbrenner's ecological systems theory (1979), which emphasized the complexity and interrelated forces of the child and his/her environment. For example, Skipper, the youngest child in the study, was diagnosed with ADHD, a language disorder, and vision problems. Her 'microsystem' consisted of trying to keep up with her classmates in spite of academic delays in all areas. According to her mother, she was victimized by her classmates on a regular basis, in a class of 28 students. She was sent home from school on a regular basis due to behavioral problems. She had experienced the breakdown of her parents' marriage, frequent moves, a prolonged separation from her parents, and sexual abuse by a family friend. Her parents reported that, in spite of their marital breakdown and the mother's lesbian relationship, they got along well and shared in Hazel's upbringing. Matches and lighters were available in the home because the adults smoked and liked to burn candles. Hazel' s 'mesosystem' consisted of a tense relationship between the home and the school. The settings identified in Hazel's 'exosystem' included her father's unemployment (necessitating his residing with his former wife, her partner, and Hazel) and her mother starting a new, temporary employment at minimum wage. The only person with permanent employment was her mother's partner who provided financial support for the family. In the broader social context, the 'macrosystem' consisted of educational cutbacks and changes in special education policy, favoring inclusive education.

Bronfenbrenner's ecological systems theory is congruent with the dynamic-behavioral paradigm, which emphasizes combined constitutional, environmental, and experiential factors in juvenile fire setting (Fineman, 1980; Gaynor & Hatcher, 1987; Kolko & Kazdin, 1986; Vandersall & Wiener, 1970).

However, unlike the dynamic-behavioral perspective, the ecological systems theoretical perspective goes beyond the immediate world of the child. Briefly, according to the ecological systems theory, child development is a dynamic, mutually reciprocal process in which the child is actively restructuring the multiple levels of environment he/she encounters while being simultaneously influenced by the environments.

In summary, as children progress through elementary school, they need to master the basic academic skills (Erikson, 1959) and learn how to get along with others (Denham, 1998; Erikson, 1959; Parker & Gottman, 1989). The children in the present study experienced learning and social skill difficulties. Nine of the children experienced significant disruptions in their formative years. The disruptions may have left them with unmet safety needs (Maslow, 1954) further complicated for most of them by being victimized by peers. Learning and peer relational difficulties may have interfered with their needs to belong and to feel competent (Maslow, 1954). Although their moral development was not formally tested, their interviews suggest that they were at the earliest stage of moral development (Kohlberg, 1969). The complexity of each child's situation underlined the importance of examining juvenile fire setting behavior within the context of their individual, experiential, and environmental influences and to look beyond the immediate world of the child (Bronfenbrenner, 1979).

### The BSPP of "Controlling Fire"

In grounded theory, one looks for a Basic Social Psychological Process (BSPP) that links all the relevant categories and variables that constitute the process that leads up to the problematic behavior, in this case fire setting. Glasser (1978) suggested the use of theoretical coding to help conceptualize how the categories relate to each other. Among the 18 families of theoretical codes he developed, he proposed the "six C family" as a useful tool in explaining what processes individuals go through that lead them to a particular behavior.

Briefly, the six Cs refer to the following:

**Cause:** sources or reasons for a certain behavior

**Context:** general ambiance/environment in which the events unfold

**Contingencies:** enabling circumstances

**Consequence:** anticipated reactions

**Covariance:** connected variables

**Conditions:** qualifiers

The Basic Social Psychological Process (BSPP) that emerges from the analysis of the data is "Controlling Fire." (See Figure 1). Houghton Mifflin (1982) defines 'controlling,' as: "To exercise authority or dominating influence over; direct; regulate." In other words, a phenomenon that ties all the factors together is the lack of control the participants had over their environments, due to such factors as ADHD, learning difficulties, family disruptions, or being picked on (**cause**). Fire setting seems to be the one area where they could exert control over a part of their environment (**controlling fire**) and, in the process, also exhibit mastery (**consequences**) by putting out the fire. In the elementary school years, during which the child is at the stage of developing mastery over the tools of his or her society (Erikson, 1959), the symbol of fire is particularly important

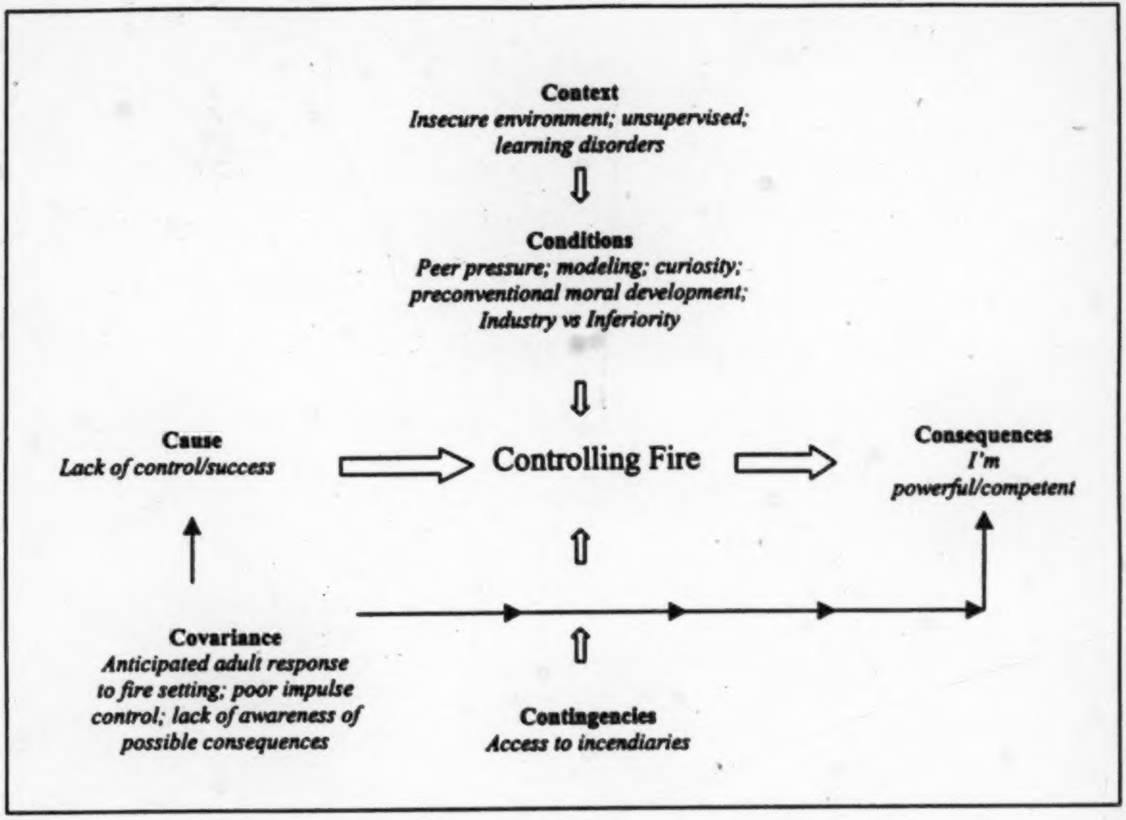
**Context**
*Insecure environment; unsupervised; learning disorders*
**Conditions**
*Peer pressure; modeling; curiosity; preconventional moral development; Industry vs Inferiority*
**Cause**
*Lack of control/success*
Controlling Fire
**Consequences**
*I'm powerful/competent*
**Covariance**
*Anticipated adult response to fire setting; poor impulse control; lack of awareness of possible consequences*
**Contingencies**
*Access to incendiaries*

Figure 1. Summary of the BSPP "Controlling Fire" using the 6Cs method

**(conditions)**. Setting fires may be a way to be in charge of a frustrating and chaotic environment **(context)** by providing a sense of being in control over a powerful symbol. Connected variables to the fire setting include poor impulse control and lack of awareness of possible consequences, combined with the anticipated adult response to fire setting **(covariance)**. The anticipated adult response is particularly important in view of the children's moral development stage, namely, the first stage of preconventional level (Kohlberg, 1969). At this stage, the child 'behaves to avoid punishment' (**conditions**). Of course, in order to be able to set fires, the children need access to incendiaries (**contingencies**). As well, fire setting usually happens in unsupervised situations (**context**).

In summary, the Controlling Fire BSPP encompasses a decision making process which is not necessarily conscious but which is aimed at exerting control over fire (which is universally considered a powerful and dangerous force) as a maladaptive resolution to feelings of powerlessness or the desire for empowerment. The Controlling Fire BSPP is summarized in Figure 1, using the six Cs family of theoretical codes suggested by Glaser (1978).

## The Juvenile Fire Setting Model

The purpose of this study was not to predict who would or would not become a firesetter but to gain a better understanding of juvenile fire setting and to develop a model based on the findings. The grounded theory method used to conduct the research was designed to assist the researcher in keeping the theory grounded in the data. The research generated an emerging theory on the fire setting phenomenon. The Juvenile Fire-setting Model (see Figure 2) was developed from the findings of this study with the intent of illuminating the factors associated with fire setting behavior in school-aged children.

Each ring refers to one of the factors that may help us understand the complexity of the participants' fire setting behavior. The first ring refers to the individual characteristics that placed them at risk for fire setting behavior. In this

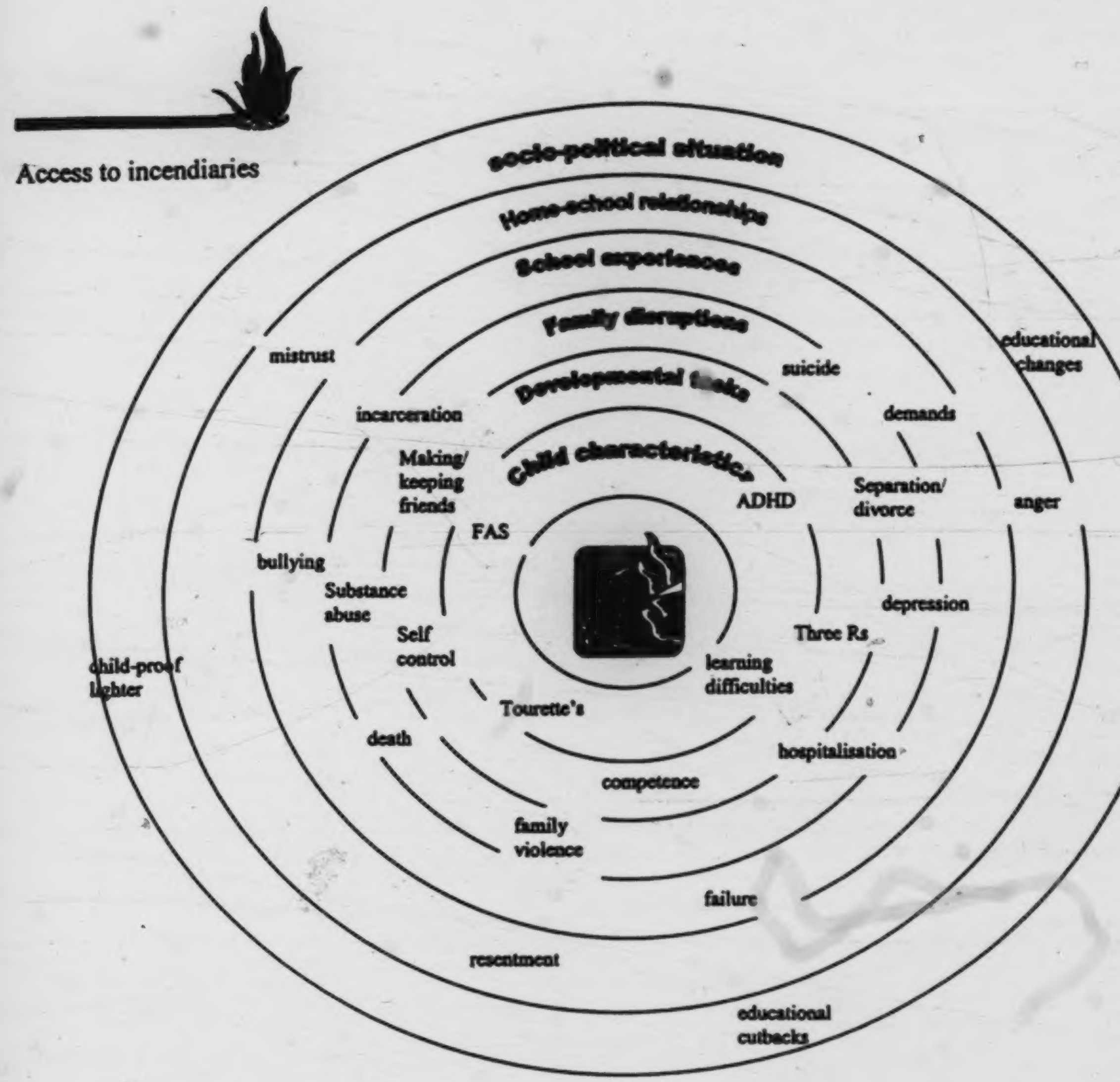
Access to incendiaries
socio-political situation
Home-school relationships
School experiences
Family disruptions
Developmental tasks
Child characteristics
mistrust
educational changes
suicide
incarceration
demands
Making/ keeping friends
ADHD
Separation/ divorce
anger
FAS
bullying
Substance abuse
depression
Self control
Three Rs
child-proof lighter
learning difficulties
Tourette's
death
hospitalisation
competence
family violence
failure
resentment
educational cutbacks

Figure 2: The Juvenile Fire Setting Model

study, there was a prevalence of learning difficulties. Nine of the children experienced academic problems. The only participant who was functioning at grade level academically was diagnosed with Tourette's Syndrome and Attention Deficit Hyperactivity Disorder (ADHD). Six other children were also identified by their parents as having the diagnosis of ADHD. Two of the participants were diagnosed with Fetal Alcohol Syndrome.

The second ring refers to the developmental tasks they were facing. As elementary school-aged children in a modern society, they were expected to be developing academic skills. As well, in order to get along at home, in school, and in the community, they needed to have developed some self-control and know how to get along with others, specially their peer group. It is postulated that accomplishment of these factors would lead to a feeling of competence.

The third ring refers to the family disruptions encountered. Eight of the children experienced major disruptions in their household, such as death of a parent, divorce, parental substance abuse, spousal abuse (sometimes resulting in hospitalization), foster care placement, or being sent to live with relatives. One of the children who did not experience such disruption had a mother who suffered from a recurring depressive disorder.

The fourth ring refers to the school experiences that increased the children's vulnerability. Most were the victims of bullying. They could not cope with the academic and/or social demands of the schools. Half of the children required special education placement.

The fifth ring refers to the home-school relationships that may have exacerbated their vulnerability. In general, the home-school relationships were strained. Mistrust, resentment, and anger towards the schools were expressed by most parents.

The sixth ring refers to the current socio-political situation. It includes the introduction of child-resistant lighters ("Lighter update," 1997) as well as major educational changes and cutbacks (Curwin, 1997; Hargreaves & Fullan, 1998).

The model reflects the complexity of fire setting behavior in the elementary school-age child. It is not clear to what degree biological factors, environmental factors, and experiential factors have provoked children to light fires and maintained the fire setting behavior. However, indications from the study suggest that a myriad of converging factors and circumstances have contributed to the participants' fire setting. Particularly troublesome are problems in peer interactions, academic problems, and behaviors that can affect impulse control. Many of the children studied had difficulty regulating their behavior and emotions. For most participants, school, in which they spend a majority of their waking hours, was not a safe place. This is consistent with an educator's observations about students considered at risk:

> They have little hope of being successful in the academic tasks they will be asked to do. They wake up every morning expecting to be told, in one way of another, that they are stupid, slow, useless, arrogant, lazy, and in trouble. They face 180 of these mornings if they go to school every day. If they have one or two good days, their expectations will not change a great

> deal. Their expectations will not change until that exceptional good day becomes routine. (Curwin, 1997, p. 35)

Most of the parents shared their children's mistrust and frustration with schools. The participants' alienation from school is particularly alarming when viewed in the context of the developmental tasks of the school-age child. Competence depends a great deal on the setting of the child, as he/she learns the things that are expected of him/her by his/her culture. If the child doesn't meet those expectations, he/she is at risk to develop feeling of inadequacy and inferiority (Erikson, 1959). As well, most of the participants appeared to be operating at the first stage of the preoperational level of moral development (Kohlberg, 1969), only obeying rules to avoid punishment rather than thinking things through. Making decisions about right and wrong behavior is an important aspect of social cognition that can have a major impact on how a child is perceived at school and in the neighborhood. Children need to feel loved and approved of by parents, teachers, peers, and others who are emotionally close to them (Maslow, 1954).

Family disruptions, threatening the parent-child relationship, are devastating to young children. Yet, being a witness to violence between people they love and count on can be even more devastating (Pynoos & Eth, 1986). Losing a parent is a terrible blow resulting in a period of bereavement that can be compromised by developmental factors, family disorganization, caretakers' reactions, and lack of support (Eth & Pynoos, 1985; Koocher, 1973). All of these disruptions, whether due to parental depression, death, divorce, or incarceration, threaten the child's most basic needs for safety and can leave a child with feelings of powerlessness (Maslow, 1954).

In the greater picture, the province in which the study took place has undergone 5 years of cutbacks in education, health care, and social services. Although there isn't a suggestion of linking these cutbacks to the problems of fire setting, the cutbacks have had an impact on the services available to children and families. As well, the media coverage of the demonstrations against the cutbacks, may have inadvertently reinforced the message that children are not important. Unfortunately, the problem of educational cutbacks is not limited to one province but is a North American problem (Curwin, 1997). Further complicating the picture are educational changes. For instance, there are rapid technological changes and increasing professional expectations placed on teachers (Hargreaves & Fullan, 1998). "Accountability" has become the driving force in education, in the midst of cutbacks. This has become translated into students' scores on standardized academic tests. Simultaneously, there is an increased concern by schools about their image, in the competition for more money (Curwin, 1997; Hargreaves & Fullan, 1998). As a result, children with learning problems have become more marginalized.

In summary, the Juvenile Fire Setting Model shows the complexity and multiplicity of factors that attend juvenile fire setting. At the core of the model are those individual characteristics that placed these children at risk. Moving outward from the core, the model considers developmental tasks, then family disruptions, school experiences, home-school relationships, and finally, the socio-political situation that exists for these children.

## Limitations of Study and Suggestions for Future Research

During the course of the study, several questions arose that could not be adequately addressed within the parameters of the study's focus. These include: What is the school's perception of the student? How does the school perceive its relationship with the child/with the family? How does the child behave in school? How does this child learn? In other words, another perspective on the child would have been valuable. This could have been obtained through a teacher interview or having each child's teacher rate the child on the Achenbach Child Behavior Checklist, Teacher Scale (Achenbach, 1991). It would have added another dimension to the study.

In regard to the present study, it would also have been useful to have either done a complete psycho-educational assessment of each child or to have had access to one, if available through the schools. This would have provided a more objective evaluation of the participants' abilities and achievement.

A longitudinal study, spanning at least 12 years would be useful to determine how the BSPP of controlling fire is affected over time. How would the participants resolve the issue of competence and mastery over their developmental course? Would they resume setting fires under stress, use other maladaptive ways to control their environment, or find acceptable ways to resolve the psychosocial struggle of industry vs. inferiority?

A longitudinal study over several years would also be of benefit in addressing fire setting behavior prospectively. A prospective study could address whether a) the degree of alienation felt by the individual;(b) the methods used in fire setting, and (c) the acceptance of responsibility for the fire setting are accurate predictors of future fire setting?

All the participants in the study were referred by a community resource. The selection of a community-based sample was deliberate, in order to avoid the pitfalls of clinical or institutional samples. However, having only one source of referrals may have weakened the ability to generalize the findings to other populations, especially given the secrecy with which juvenile fire setting takes place. However, the model is adaptable and allows for the addition of factors that may emerge from future research.

## Implication for Helping Professionals

As noted earlier, the participants' comments about the impact of getting caught indicate moral development at the first stage of the pre-conventional level (Kohlberg, 1969). The implications are that immediate response by a professional with combined training in fire prevention, fire investigation, child development, and child interviewing is a key to prevention of fire setting.

As well, the important role of the school in the life of children is underscored by the interviews. Children with special needs and their families are particularly vulnerable to the school environment. It is evident that school systems must focus on a systemic method of addressing these children's academic, emotional, and social learning needs. In a discussion about students at risk, Curwin (1997) commented:

> Imagine how different learning would be for these students if when they woke up in the morning, they were excited about going to school; if on the way to school, they thought about how happy their arrival would make everyone they saw and how well they would do in their subjects that day; if they knew that their teacher would call on them and say, "Great job," when they finished their task. When they opened the door and walked in, they would feel at ease, as if they belonged. (p. 35)

Schools must provide competent counselors who understand child development and the concept of disenfranchisement and have the ability to help empower students so they can gain a sense of control over their environment. They also need to make a priority of individualized program plans based on a comprehensive understanding of the whole child, in order to ensure that each child has the opportunity to be successful.

Parents and schools must form partnerships in order to maximize their effectiveness. Parents should be seen as an integral part of the team and treated in a way that reflects this. A school climate that permeates openness to working cooperatively with parents and the community gives the message that learning is a life-long endeavor. Collaboration between home and school is a particularly important consideration in the effective management of children with learning difficulties.

Parents would benefit from information about child development and management. Specialized courses and support must also be accessible to parents of children with special needs. The children would have an understanding of their special needs along with a chance to ask questions and learn strategies to cope with the condition(s). With the emphasis on inclusive education in North American schools, it is imperative that teachers be trained to work with all children and be provided with the support necessary to ensure quality education. Educational reforms must reflect the greater diversity of schools, be research-based, and include the input of major stakeholders.

The community also has a responsibility in addressing the problem of juvenile fire setting. Greater emphasis should to be placed on fire prevention in the home, school, and community. A better understanding of the dynamics of childhood fire setting would also assist in the prevention of the problem. There is an important role for the fire department in fire safety education with parents, schools, and community as well as in doing follow-up with children involved in fire setting.

There is a need for accessible community programs aimed at strengthening families by providing parent support groups, child management information and courses, and in-home support. Outreach services and respite care must be made available to at-risk families, in order to reduce and deal with social and life stresses on these families.

The findings of the present study also imply an important role for children's hospitals and mental health clinics in providing services for juvenile firesetters. Early intervention and timely accessibility to assessment and treatment are necessary. It is important that the facilities providing assessment and treatment be able to deal with the complexity of childhood disorders and family pathology. Rather than a child-focused treatment approach, a multidisciplinary approach is needed, using a variety of clinicians trained in child, adolescent, adult, and family therapy. It is vital that all individuals and agencies work in a collaborative manner in order to maximize success.

On a more preventive basis, it is evident that the community must become proactively involved in recognizing and reinforcing the assets of children. It would be beneficial to empower children by showing them how they can make a difference in their community and giving them the opportunity to do so through cooperative endeavors, youth leadership programs, and volunteer work involving school-age students in cross-age projects.

## Conclusion

Using grounded theory, this study examined the phenomenon of child firesetters who were identified as definite risks for further fire setting by the fire department. The juvenile fire setting model was generated through the interview of 10 school-age children and their parents. The organizing framework provides a fresh perspective on children setting fires incorporating developmental literature and some of the aspects about fire setting in children and in adults that is already known. The findings suggest that fire setting behavior among school-aged children is a complex problem involving a myriad of converging factors and circumstances resulting in feelings of inadequacy and lack of control in children.

Fire setting is presented as an attempt to exert control over a small part of the child's environment.

The emerging theory offers the potential of developing new strategies for prevention and intervention in childhood fire setting. In addition, it reinforces the importance of the role of the school and the family.

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## APPENDIX A

Louise Nadeau-Gaunce
14008 - 88 Ave.
Edmonton, Alberta
T5R 4J3

Dear family,

I am a graduate student in the Department of Educational Psychology at the University of Alberta. I am currently doing a doctoral dissertation on the topic, "Children who set fires: Towards a better understanding."

I would sincerely appreciate your assistance in this study. I am hopeful you and your child may help me to understand more about what leads children to set fires. By participating in the study, you will be assisting me to help other children and their families. As a participating family, this would require one interview with (a) parent(s) and one or two separate interviews with your child. You may choose to have the interviews at your home or at my office. I will pay your family $25.00 for your time.

Although I would appreciate your help, you are under no obligation whatsoever to participate. If you agree to participate, your names will not appear on any of the interviews and all the information will be kept completely confidential. You may withdraw from the study at any time.

I would be pleased to answer any question that you have about this study. If you wish to participate or have any questions please contact me at 483-1920. Thank you for taking the time to consider my request; I hope to hear from you soon.

Sincerely,

Louise Nadeau-Gaunce

## APPENDIX B

### Guiding Interview Questions

Parent/Guardian Interview

Describe your child.

How was (child's name) as an infant?

Tell me about his/her development/experiences/illnesses/injuries.

Has (child's name) been diagnosed with any childhood disorder?

How is (child's name) doing in school?

How do you discipline him/her? What works/doesn't work?

What are (child's name)'s strengths/challenges?

How does he/she get along with other children?

Tell me about your family.

Describe (child's name)'s fire setting behavior.

How did you react when you found out?

What experience had (child's name) with fire before he/she started setting fires?

What was happening in (child's name) prior to or at the time of the fire setting?

What has (child's name) told you about his/her fire setting?

What have you done to prevent more fire setting?

Child Interview

Tell me about yourself.

What do you like to do for fun?

What's the best thing about you?

Tell me about your friends

What makes you a good friend?

I'd like to find out more about your family.

How is school going?

What's your best/worse subject?

What's your favorite subject?

Three wishes.

Tell me about your fire setting.

How did you feel when this happened?

What were your reasons?

Who was involved besides you?

What happened to you after you were caught?

How old were you when you first played with fire?

What would have helped you stop, the first time you played with /set a fire?

Why do you think that kids play with/set fires?

What would you say to a boy/girl younger than you that was setting fires?

What advice do you have for the parents of kids who set fire?

What else would you like to tell me about yourself?

# APPENDIX C

University of Alberta
Faculty of Education, Department of Educational Psychology
Informed Consent Form

PROJECT TITLE: Children who set fires: Towards a better understanding.
INVESTIGATOR: Louise Nadeau-Gaunce Phone: 483-1920

The purpose of this research project is to understand more about what leads children to set fires.

Should you consent, you will be asked to fill out a checklist about your child and to participate in one parent(s) interview. Your child will be asked to participate in one or two separate interviews. Each interview will last approximately one hour. These interviews will be audio-taped and transcribed. Your names will be replaced by pseudonyms and any identifying information will be deleted from the transcripts. The checklist, tapes and transcripts will not be shared with anyone not directly involved in this research. Anonymous quotations from these interviews may be included in the final report. Your family will be paid $25.00 for your time.

THIS IS TO CERTIFY THAT WE ______________________________
(print names)

HEREBY AGREE TO:
Participate as informants in this research project. We agree to be interviewed and for these interviews to be audio-taped and transcribed. All tape recordings and transcripts will be stored in a locked cabinet. We understand that at the completion of the research, the tapes will be erased. All names, codes, and addresses will also be destroyed at the end of the study. I understand that the research findings will be published, but our names and any identifying information will not be associated with the research.

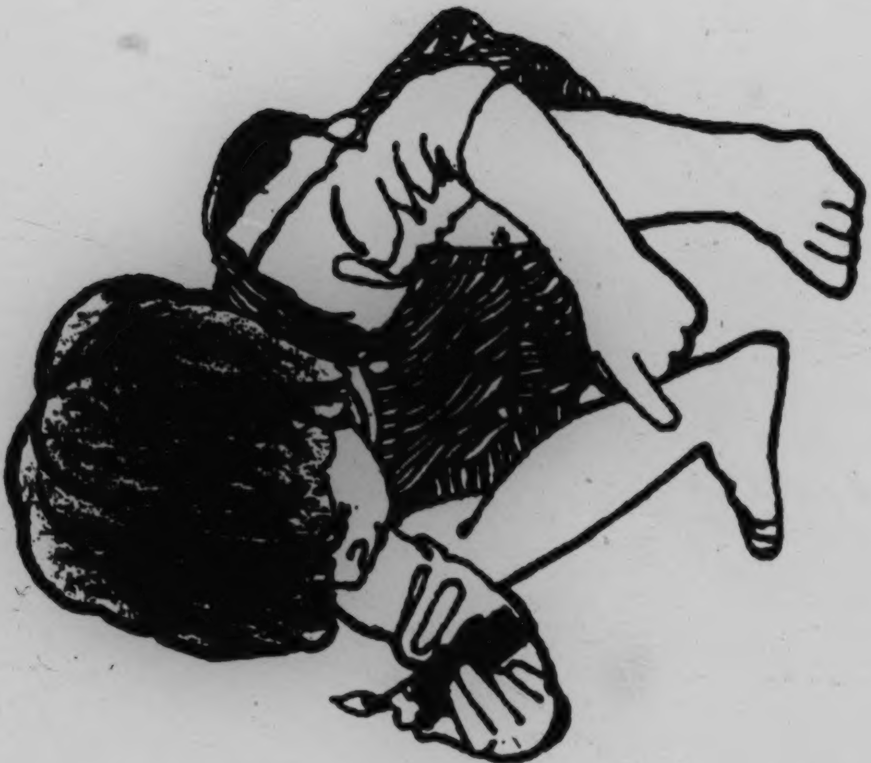
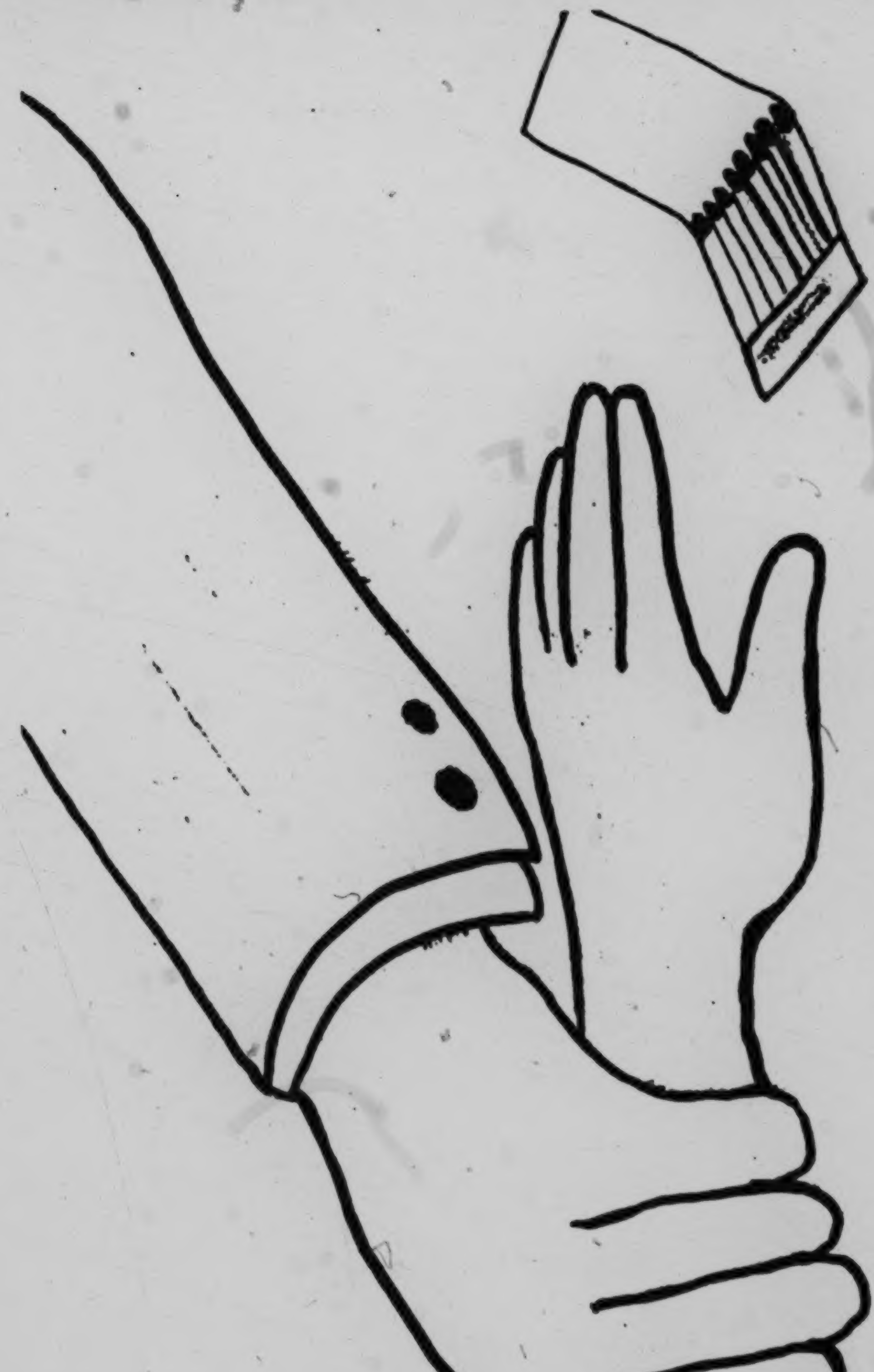
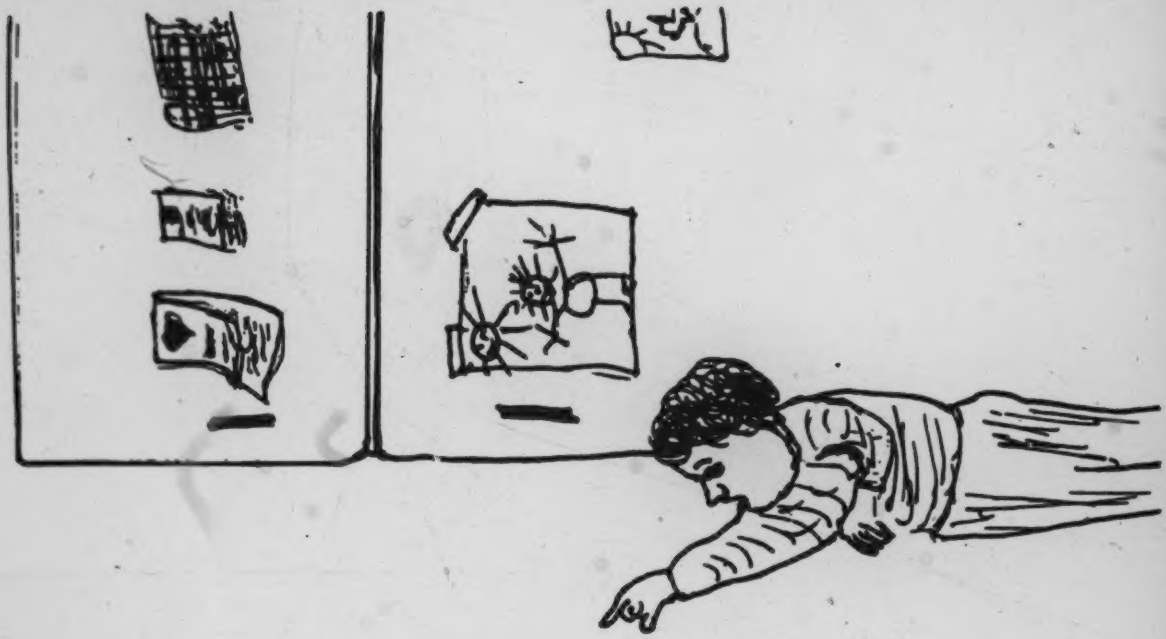
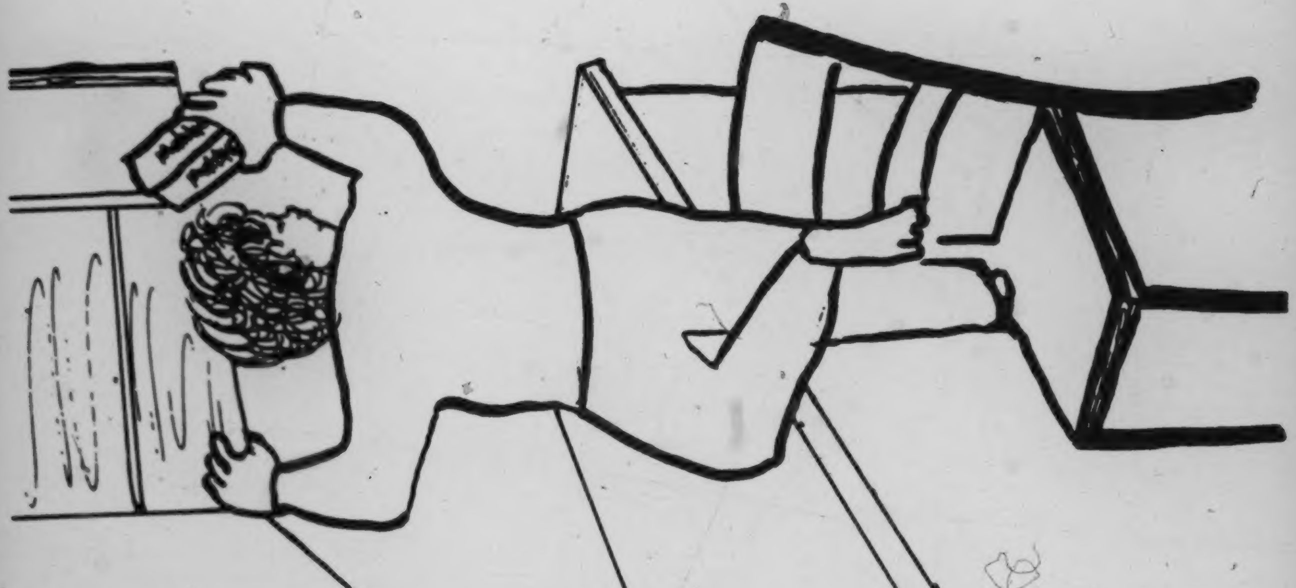
We understand that we are free to not answer specific questions. Should the interviews evoke strong emotions in our child, we understand that the researcher will provide crisis intervention and referral to an appropriate agency. We also understand that we can withdraw from the study at any time without any penalty.

We have been provided with the opportunity to ask whatever questions we desire and these have been answered to our satisfaction.

| | |
|---|---|
| ______________________<br>Parent/guardian's signature | ______________________<br>Child's signature |
| ______________________<br>Parent/guardian's signature | ______________________<br>Researcher's signature |
| ______________________<br>Date | |

☐ Please check here if you would be willing to meet in a follow-up interview at the end of the study.

# APPENDIX D

## Stimulus Pictures Created by Researcher